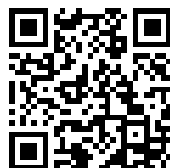


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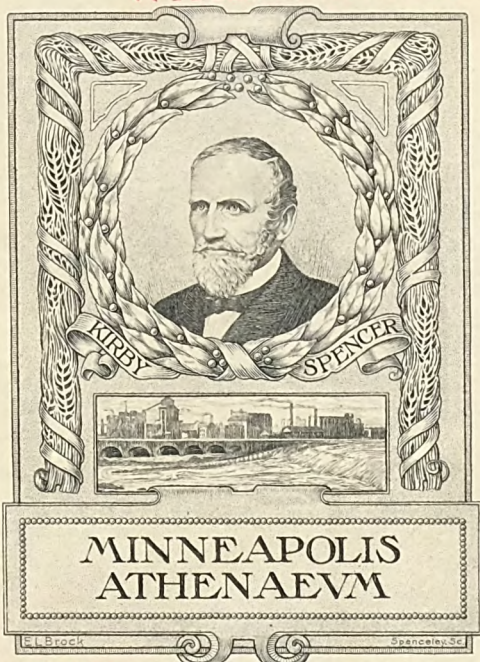


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THE ARMY QUARTERLY

With which is incorporated
The United Service Magazine

Edited by
Major-General G. P. DAWNAY
C.B., C.M.G., D.S.O., M.V.O.

and
Lieut.-Colonel T. A. HEADLAM
late East Yorkshire Regiment

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THE ARMY QUARTERLY

VOL. XVII. No. 1.

OCTOBER, 1928

EDITORIAL

VISCOUNT HALDANE OF CLOAN, K.T., O.M., whose death, at the age of seventy, occurred at his Scottish home on the 19th of August, is sincerely mourned by the whole British Army, and he will always be respectfully remembered by soldiers as one of the greatest of our military administrators. To him more than to any other man is to be attributed the efficiency of the organization which enabled the Expeditionary Force to be sent to France with such promptitude and smoothness in August, 1914, and to him the country owes the Territorial Force whose troops were to prove themselves of such inestimable value to the hard-pressed Regulars in the early days of the Great War.

* * * * *

Lord Haldane was one of the most learned and widely informed men of his time. He achieved preeminence as scholar, philosopher, educationalist, economist, lawyer, statesman and administrator, and throughout the greater part of his life he devoted his powerful intellect to the public service. It was unfortunate in the extreme that during the years 1914-1918, when his experience and organizing ability would have been of such immense value to the Army, Lord Haldane was debarred from taking an active part in national affairs. No man was ever more loyal to his country or more firmly convinced of the righteousness of the British cause—and yet “The attacks upon the loyalty of one who boasted Germany his ‘spiritual’ home were, in those heated times, as natural as they were preposterous.” * It was characteristic of Lord Haldane, and typical of his greatness of soul and philosophic outlook upon life, that he made no attempt to refute the unjust attacks made against him, and

* See *The Times*, leader, 20th of August, 1928.

continued throughout the war to work incessantly in the interests of the Army and of the nation.

* * * * *

Mr. Harold Baker's article in this number of the *Army Quarterly*, dealing with Lord Haldane's administration at the War Office, will be read with interest by all soldiers. No one is better qualified than Mr. Baker to write on this subject. He was one of Lord Haldane's most intimate friends and was closely associated with him in his Army work. His article shows with what energy and ability Lord Haldane tackled the problems of military reorganization from the moment he went to the War Office on the formation of the Campbell-Bannerman Government in December, 1905. His task was one of extraordinary difficulty because a large, and by no means the least influential, section of the Liberal Party was opposed to any increase of military expenditure, and the Secretary of State, as Lord Grey has recorded, was obliged to "argue and struggle" for every penny that he required. He had, too, to face the opposition of old-fashioned military critics who viewed with alarm and despondency any change in the numbers or in the composition of the Regular Army, and who were loud in their derision of his proposals for the establishment of a Territorial Force. It was difficult, indeed, for many people to believe that a middle-aged Chancery barrister, who had had no previous experience in military affairs, could possibly produce any sound scheme of Army reform. But Lord Haldane, when he had once made up his mind as to the lines on which the reorganization was to be based, pressed steadily on with his scheme and finally brought it to a triumphant completion. In the planning and execution of the details of his scheme he utilized to the full the advice and help of his trained military assistants. Unlike some other Secretaries of State, whose names can be called to mind, Lord Haldane appreciated the assistance of expert opinion and knew how to employ to the best advantage the services of the General Staff. His object, after he had given himself time to study the situation and to estimate the national requirements, was to provide the country with a really efficient and well-equipped Expeditionary Force that could be rapidly mobilized and dispatched overseas in the shortest possible space of time. Behind it, he decided to replace the Militia by a Special Reserve, in order to provide for war wastage in the Expeditionary Force, and to establish out of the Yeomanry and Volunteers a Territorial Force for home defence consisting of fourteen mounted brigades and fourteen infantry brigades with its own artillery and engineers. In addition to these far-reaching changes, he decided

to form an Officers' Training Corps which was to provide an initial military training for officers at the public schools and universities.

When Lord Haldane—he was created a peer in 1911—left the War Office in 1912, on his acceptance of the office of Lord Chancellor, he had accomplished his great work. He had made our military organization ready for the ordeal of 1914. The result fully justified his prescience and organizing skill. When “the day” came the Expeditionary Force was mobilized and sent to France without any hitch, and no more highly-trained or better equipped army ever went to war. The mobilization of the Special Reserve and of the Territorial Force was equally successful, and, as a result, the most difficult period of the war was got over without disaster, while Kitchener’s “first hundred thousand” were being trained.

* * * * *

Critics have argued, and probably will continue to argue for all time, that Lord Haldane’s military preparations were wholly inadequate for the purposes of the war that was in prospect when he was Secretary of State. It is urged that he should have boldly accepted Lord Roberts’s scheme of national service as the only method of supplying the numbers which a contest with Germany called for. The actual war undoubtedly proved the need for men and yet more men; but Lord Haldane, as a practical statesman, had to distinguish between what was possible and what was impossible. At the time when he was in charge at the War Office neither his Party in Parliament, nor the country as a whole, would have tolerated anything in the nature of conscription. His task was to reorganize our defence force on the voluntary system, and his labours led to the creation of a first-class military machine contrived to conform with that system—a machine which worked admirably and fulfilled its purpose to the amazement of the world in the greatest war in history.

Great Britain and the Empire owe a deep debt of gratitude to this wise and infinitely painstaking public servant whom future historians will look upon—as the French look upon Carnot—as an “Organizer of Victory.”

* * * * *

So much has been written in the Press, and so many and various opinions have been expressed, during the last few weeks regarding the Pact for the renunciation of war, signed at Paris on the 27th of August, that it is likely that “the man in the street” may find it hard to make up his mind as to the real value of this international agreement. Some enthusiasts go so far as to assure to him that the

signing of this declaration against war as an instrument of national policy by so many States may be considered as the beginning of the millenium ; others tell him that the Pact, like any other treaty, is only a scrap of paper meaning very little and liable to be torn up at any moment. The truth, of course, lies somewhere between these two points of view. It is not wise either to overrate or to underrate the importance of this attempt on the part of statesmen representing so many countries to outlaw war. Their aim at any rate is perfectly definite, however vague may be the implications of the actual instrument which they have signed. They recognize that war as a means of settling international disputes is disastrous for modern civilization and, on behalf of the States which they represent, they solemnly announce their intention not to have recourse to it. Such a declaration, initiated by the United States of America and agreed to by the Great Powers of Europe, including Russia, cannot fail to have a moral effect upon international relationships and should do something to create a better and more peaceful atmosphere throughout the world. "The Pact is primarily an act of faith and will, and, if its significance is psychological rather than legal, it is none the less important as a very serious attempt to break away from an age-long obsession." *

* * * * *

No one but an unthinking optimist, however, would be bold enough to suggest that the mere statement of intention contained in the Pact was sufficient in itself to prevent war. A wise man may well rejoice in the acceptance by the nations of this peaceful declaration, but he will be satisfied in regarding it merely as a landmark in what has been described as "the movement away from war." It is a gesture displaying the fixed determination of the men and women of this generation to preserve the peace of the world. There is nothing surprising in such a determination. It is only natural that we, who know by bitter experience the misery and desolation and despair entailed by war, should be ready and eager in our resolution to prevent the recurrence of another catastrophe such as that of the Great War. "We may surely say without fear of contradiction," as the Dean of St. Paul's remarked in the course of his sermon at Geneva on the 2nd of September, "that no one who has anything to lose is ever likely to vote for such a war again." But one generation soon passes away and gives place to another. Men's memories are short and the lessons of the past are soon forgotten. There is no real reason to suppose that because we to-day are convinced of

* See *The Times*, leader, 27th of August, 1928.

the futility of war our grandchildren and great-grandchildren will be equally so convinced. If the peace of the world is to be preserved for all time, the causes which bring about wars between great nations will have to be removed, and this is a problem for statesmen which no Pact, such as that which has just been signed at Paris, can solve.

* * * * *

It is the habit nowadays for many earnest and well-meaning, but usually ill-informed, people who are anxious to guide their fellow-men into the way of peace, to attribute the responsibility for wars to militarists and diplomatists, to kings and emperors, to financiers and armament manufacturers. They would have us believe that men in the mass are naturally haters of war; that the establishment of democracies in the place of monarchies will make for peace. There is little solid foundation, however, for any such belief. "The notion that wars are made only by kings and emperors, and that to make the world safe for democracy is to make it safe for peace, is," as Dean Inge had the courage to point out to the League of Nations at Geneva, "utterly untrue, and extremely dangerous. The old proverb, *Delirant reges, plectuntur Achivi*, requires to be amended in the light of recent events. It should run, *Delirant Achivi, plectuntur reges*. Nations go mad, and make scapegoats of their rulers. My study of modern history convinces me that in bellicosity and injustice to weaker nations there is not a pin to choose between monarchies and republics." So long as human nature remains the same, there is always danger of war. This may be obvious enough to readers of the *Army Quarterly*, but, at a time like the present, when the whole world in its intensely earnest desire to have done with war is ready to believe in some easily obtained panacea for the evil, it is absurd not to face the fact that war cannot be outlawed by a stroke of the pen, however well-intentioned may be the holder of the pen. If we really mean to accomplish our purpose, we can only do so by striving with all our might to do away with the causes that lead to war. "Is not the real truth, then, to be found in this? That war is a ghastly and terrible evil, but that it is a symptom, not the disease. That to attack war, to try to abolish war, is to try to abolish a symptom, which, without attacking the disease, is probably impossible. That the disease to be attacked is the state of affairs in the modern world—the envy, hatred and malice—which renders war still possible. If this be the truth, the weakness of the pacifist case lies in the failure to realize it; just as the real justification for abhorrence of militarism lies in the fact that the militarist approves

the continuance of a state of society of such a kind as renders the evil of war possible." *

* * * * *

What, then, are the causes which lead nations to go to war with each other? In these Notes from time to time during the last eight years attempts have been made to enumerate them, and the moment seems to be an opportune one for drawing attention again to the real difficulties which lie in the way of the achievement of a lasting peace. No one—least of all a soldier—wishes to belittle the steady work which is being done by the League of Nations to bring about a general reduction of armaments. Such work is all to the good because it keeps constantly before men's minds the danger to peace that comes from a competition in armaments. But it would be a mistake to suppose that a mere reduction in the size of navies, armies and air forces must necessarily prevent another outbreak of war. Each nation will be obliged to retain a nucleus of armed strength for the preservation of law and order at home and for the protection of outside dependencies. In these days, when the essential material of war can be so easily provided and expanded from civilian sources of supply, and when the whole manhood of a nation can be speedily mobilized for war service, it is obvious that a limitation in armaments in time of peace might lead to little except a welcome relief to the overburdened taxpayer. The maintenance of armed forces would be less expensive, but war would not thereby be rendered more unlikely—indeed, it might not unfairly be argued that by saving money in time of peace a nation would have a greater reserve of gold when "the day" arrived.

Civilized nations, as Dean Inge reminds us, do not—whatever the cranks and faddists may wish us to believe—"regard war as a sport. They do not enjoy fighting as the head-hunting tribes of Borneo are said to do." If a nation decides to go to war, it does so for some reason, tangible or intangible, which appeals to the instinct or to the passions of its people. The reason may be traced either to economic conditions, such as a desire for territorial expansion due to the pressure of population in the homeland; or to patriotic emotion which inflames the pride of race and fills a nation with a burning ambition to spread its culture far and wide; or to fear, a feeling of insecurity which makes a nation distrust its neighbours and believe that in attack lies its best means of defence.

At the present time—there is no good purpose served by disguising the fact—all these causes of war are in existence. The

* See Editorial, *Army Quarterly*, October, 1920.

settlements made after the Great War, in some cases at any rate, were such as to contain within them the germs of future wars. At no period in the history of the world has the spirit of nationality, with all that it implies, been so keenly alive in Europe as it is to-day ; at no period has the antagonism between East and West been so marked, or the clash of political and social ideals been so acute.

The task before the world's statesmen is no easy one : it is only by the exercise of infinite patience and perseverance that the influences which render war possible can be overcome. Irresponsible persons, therefore, who, in order to make the world a better place, are quite ready to accept precipitate decisions on matters such as disarmament, would do well to remember that much has been done in a comparatively short space of time to devise a practical means of settling international disputes without recourse to war. They should be content to put their trust in the machinery of the League of Nations, slow-grinding though it may be, and should bear in mind that agreements such as the Locarno Treaties have done much to foster that feeling of security which can alone banish fear and thus give the best guarantee of peace.

* * * * *

The air defence exercises for 1928 happened to take place during a week when, apart from the reprieve of three murderers, there was very little to occupy the columns of the daily Press, and, in consequence, the public were given ample opportunity to read all about them.

Numerous writers proceeded at once to draw their own conclusions as to whether a hostile Power could, or could not, successfully attack these islands by air. In many ways this was quite a natural thing to do, and it offered a pleasant opportunity to write articles of a somewhat sensational nature. But whether the conclusions which these writers have drawn are correct or otherwise, it is quite clear that they have acted on the erroneous assumption that the exercises were designed by the Air Ministry to solve a strategical problem. In point of fact, control of the exercises was left very largely to the Command concerned—the Air Defence of Great Britain—and it used them as a means of testing the organization and tactical efficiency of individual units.

The Air Ministry, no doubt, will look for any lessons that are to be learnt concerning the wider aspects of the exercises, but no such lessons can possibly be brought to light until all the relevant facts have been collected and put into their true perspective.

There is no doubt that the course of the exercises was watched

with genuine and appreciative interest by the public, not only in the south-eastern districts of England, but also throughout Great Britain. It was only natural that this interest should be greatest in the London district, since it was here that the aircraft were to be seen or heard actually at work.

It has been suggested that there is no need for these exercises to take place over London itself. But to carry them out elsewhere, although less of a strain on the pilots of aircraft, would have at least two disadvantages. The defence scheme has rightly been drawn up with London as its centre, and, to practise the various units of the defence force in their duties, it is almost essential that they should operate in the area where they would have to work in war. Again, one of the important elements in the system is the body of volunteer ground observers who furnish reports of hostile aircraft, and who can hardly be expected to move from their homes for the period of the exercises.

* * * * *

Putting aside any attempt to deduce strategical lessons, there are many matters of interest which have emerged from this year's exercises. It is clearly not possible to deal with them all in these Notes, but allusion may be drawn to the following points :

- (a) The exercises were carried out at high pressure—too high no doubt to last for any length of time. But it is just as well to bear in mind that hostile attacks would probably be pushed home on some such intensive lines, in an attempt to secure a quick decision.
- (b) It was amply demonstrated that however competent R.A.F. squadrons and anti-aircraft defences may be, their task is one which necessitates every effort being made to render them even more efficient.
- (c) Excellent work was done by the Auxiliary Air Force squadrons. This proves that this type of unit affords perhaps the best prospect of obtaining an increase in the number of our aircraft without a corresponding increase in expenditure. A civilian who is keen on serving his country cannot find a better method of doing so than by joining one of these squadrons, or, if he may not be young enough to fly, one of the other non-Regular branches of the air defence system.
- (d) The great interest which was displayed in the exercises, both at home and abroad, far from provoking people to adopt a war-like attitude, is likely to serve the cause of

peace as effectively as any other means that has yet been tried.

* * * * *

In view of the Russian Government's acceptance of the Peace Pact and its somewhat dramatic proposals for total disarmament at Geneva this year, the extensive manœuvres of the Red Army which are just beginning near the Polish frontier may arouse more attention than might otherwise have been the case. It is reported that in the neighbourhood of Kieff some 300,000 Regular troops together with "trade union detachments" will take part in operations which are to include a gas attack on Kieff from the air. Manœuvres are also to be carried out in the Leningrad area and in other parts of Russia.

To soldiers the feature of the Bolshevik training that will be studied with most interest is the introduction into the scheme of operations of bodies of working men organized by the trade unions. The object of this new departure in military training is said to be due to the desire of the Soviet authorities "to accustom the local population to war conditions," and the *Izvestia* states that special meetings are being organized in all labour centres in the Kieff district to discuss technical and military questions and to explain the object and the importance of the manœuvres round Kieff in the present year.* In the Leningrad area, however, the trade unionists appear to be going to be indulged in what are described as "pre-eminently military exercises" and sham battles are to be fought by "armed trade unionists formed into detachments of riflemen, sappers and bombers, and supported by tanks commanded by officers of the Red Army. Tukhachevsky, Commander-in-Chief of the Leningrad military district, will take supreme command of these manœuvres."†

* * * * *

The death of Marshal Fayolle at the age of seventy-six deprives the French Army of one of its best fighting leaders in the Great War. He was born at Le Puy in 1852, and had therefore reached the age of sixty-two when hostilities broke out in August, 1914. He had actually been placed on the retired list earlier in that year, but was recalled on mobilization to command the 70th Reserve Division. The "Division Fayolle," as it was soon known as, took a prominent part in the fighting round Nancy and in the various actions which followed in the autumn of 1914, and in the first battle of Artois in the spring of the next year. During this strenuous

* See *The Times*, 30th of August, 1928.

† See *The Times*, 7th of September, 1928.

period of the war Fayolle earned a well-deserved reputation as a fighting leader, and his promotion in June, 1915, to command the XXIII Corps in succession to Pétain was extremely popular with the Army. In the following year he was given the command of the Sixth Army, which he led with conspicuous ability in the battle of the Somme. It was during these operations that Fayolle came in contact with the British, and then—and subsequently in Italy and during the great German offensive in 1918—he proved himself a thoroughly good comrade in arms. In December, 1916, he was transferred to the command of the First Army and led the French advance which followed the retirement of the enemy to the Hindenburg Line. In May of the following year he was promoted to command the Group of Armies of the Centre, and was in charge of the operations at Verdun which resulted in the capture of Hill 304, Mort-Homme and Hill 344. Later in the same year, after the disaster of Caporetto, he was sent to Italy to assist the Italian High Command as an adviser, but this was scarcely the kind of employment for which a soldier of Fayolle's temperament was best suited, and he soon returned to France. For the remainder of the war he commanded a Group of Armies, first, in the region between the rivers Somme and Oise for the protection of Paris, and later in the Allied advance to victory. After the conclusion of the Armistice Fayolle commanded the French troops in Germany for a year, and was subsequently sent as his country's representative on a mission to the United States of America and Canada. His great services in the war were rewarded by the bestowal upon him of the grand cordon of the Legion of Honour, the *médaille militaire* and the *baton* of a Marshal of France.

* * * * *

Marshal Fayolle, like his friend and contemporary Marshal Foch, was an artillery officer, and, as an instructor at the *Ecole Supérieure de Guerre* before the war, he was largely responsible for the artillery training of the French Army. He was by no means an adherent of the dashing school of military thought which was in the ascendant in France in the years immediately preceding the Great War. He did not believe in the possibility of the "offensive at all costs." He held that in modern warfare offensive operations could not be carried out successfully without full artillery preparation and cover. He was, therefore, a firm advocate for the concentration of artillery fire, and he was able to demonstrate the soundness of his opinion in the many actions which he fought in the war.

Fayolle, despite his age, was a man of tremendous energy and

“drive” who himself worked with relentless ardour and expected others to do the same. He was a fine soldier and leader of men of whom his country may be justly proud.

* * * * *

At a recent meeting of friends and comrades of the late Lieut.-General Sir Ronald Maxwell it was decided to erect a memorial to mark the admiration and respect for his character which was felt by all who knew him, and to commemorate the eminent services which he rendered, particularly when Quartermaster-General to the Forces in France during the Great War.

The General Committee, of which General Sir Bindon Blood is Chairman, has decided, with the permission of the Dean and Chapter, to place the Memorial in Rochester Cathedral, close to where so much of Maxwell's Home Service was spent and where he was married. It is hoped to raise sufficient funds for a stained-glass window and tablet.

It is thought that the scheme will appeal to many of those who were associated with Sir Ronald Maxwell during his career, and that these may welcome the opportunity of contributing to the Memorial.

Donations will be gladly received and acknowledged, but no statement of individual contributions will be published.

Lloyds Bank, Limited (Cox's and King's Branch), No. 6 Pall Mall, S.W.1, has kindly consented to open an account called the “Maxwell Memorial Fund,” into which contributions should be paid direct.

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The Editors have received the following letter from Colonel J. F. C. Fuller :—

Crowthorne,
Farnborough, Hants,
July, 1928.

GENTLEMEN,

In the July number of the *Army Quarterly*, p. 370, Mr. Germain in his article “Armoured Warfare: A Plea for Common Sense,” quotes me as saying: “250 machine gunners possess the fighting power of 1,000 riflemen.” What I wrote in my book: “The Foundations of the Science of War” (p. 269), was: “*For argument's sake, I will accept the statement that 250 machine gunners possess the fighting power of 1,000 riflemen. . .*” The words in italics would not have unduly lengthened Mr. Germain's article, but their addition entirely spoils his argument. Whether lopping quotations to fit the bed of his Procrustean ideas falls under the heading of “common sense” I am unable to say; but that it fails to fall under that of common honesty must be apparent to all who have read his recent book. In it the process of condemning others by misquoting is carried—I trust he will excuse the word—to *scientific* per-

fection. I might add that the quotation made use of by Mr. Germain is, as my book will show, simply a hypothetical illustration of Mr. Lanchester's "N. Square Law." In fact, I have no idea how many riflemen equal a tank, or, for that matter, how many coracles it takes to sink a "Dreadnought".

Yours faithfully,
J. F. C. FULLER.

It is obviously unwise for any outsider to attempt to follow Colonel Fuller's subtle discrimination between an illustration and an expression of opinion. It would be stepping in where angels fear to tread. All that can be done is to recommend readers of the *Army Quarterly* to study carefully Colonel Fuller's admirable book, "The Foundations of the Science of War," in conjunction with Mr. Germain's article "'Armoured Warfare': a Plea for Common Sense," which was published in the *Army Quarterly* last July, and then to form their own opinions.

10th of September, 1928.

LORD HALDANE

BY THE RIGHT HONOURABLE H. T. BAKER, Financial Secretary
to the War Office, 1912-1915

WHEN in 1905 Lord Haldane, then Mr. Haldane, became Secretary of State for War, there was some surprise both at the offer of the post and its acceptance. It is now a commonplace to say that he proved to be the greatest War Minister since Cardwell. Lord Haig indeed, in the copy of his despatches which he presented to him in 1919, wrote: "To the greatest Secretary for War England has ever had!" and history is not likely to disagree with Lord Haig's omission of all comparisons. But beneath this unanimity of opinion there are lingering vestiges of criticism, and to estimate truly the extent of Lord Haldane's aims and achievement it may be well to re-state briefly the problem and the solution as they presented themselves at the time. Moreover, a generation now removed by more than twenty years from the date of his reforms and still suffering from the shock of war may need to be reminded of what it is beginning to look on as ancient history.

In spite of the lesson of the South African War, when Lord Haldane took office the military forces of the Crown could be described without exaggeration as a chaotic assemblage of fragments incapable of mobilization. The Regular Army was seriously deficient in many respects and no provision had been made for supplying the deficiencies in the event of war. It was not fully organized in divisions with the requisite staffs and commanders for war. The Cavalry was short of horses, the Artillery of men, and the only large unit, the Aldershot Army Corps, was unfit to take the field without considerable delay. In the second line was the Militia, which was bled by the Regular Army in time of peace and under no obligation to serve abroad in time of war. The third line was composed of an indeterminate mass of Volunteers and Yeomanry, which competed with the Militia for the best of its recruits. Though an attempt had been made to lay the foundations of a brigade organization, in general the Volunteers had no unit above that of a battalion. In some branches, such as garrison artillery for coast defence, they had a surplus; in others, notably in field artillery, they were wholly wanting, unless a number of

so-called batteries of position, armed with museum specimens, were to be reckoned under this head. They were distributed over the country in haphazard fashion, with no regard to military necessities. The three lines were uncorrelated, and had no defined functions. Above all, there was no power of expanding the Regular Army in time of need.

These were the elements of the problem which Lord Haldane and his professional advisers had to solve. It was a great advantage to the new Secretary of State that unlike some of his predecessors he came with no preconceived ideas, but with a fresh mind then at the height of its powers. He began by asking himself for an exact and incontrovertible definition of the purpose for which the Army was needed, and from this starting point proceeded logically to adapt the old and construct the new in accordance with his definition. Having a remarkable faculty for perceiving underlying general principles, he was content to lay down broad lines and give large powers to the heads of departments to work them out in detail. As he exercised a careful supervision and was never unaware of what was being done, his period of office was not only one of great reforms but also conspicuous for good administration.

During the years 1906-1908 the framework of a new order of things was securely built. In the result, the three lines were replaced by two, each with clearly defined functions. The Expeditionary Force was created with a divisional organization complete in divisional cavalry, transport, medical and supply services, and also a Cavalry Division, all capable of ready mobilization and concentration. The Special Reserve, which took the place of the old Militia, was designed to complete the Expeditionary Force in certain minor respects on mobilization, but principally to cover wastage during the first few months of a war. By an extensive scheme of subsidy and registration, an ample supply of horses was guaranteed for the Cavalry, and, at a later date, a similar system was applied to mechanical transport for the Army Service Corps.

The second line was the Territorial Force, composed of fourteen divisions and fourteen mounted brigades, also complete with all the auxiliary services in due proportion and organized as an army on substantially the same pattern as the Regular Army. It was designed for home defence, or for voluntary service abroad. Field artillery was formed in part from redundant garrison artillery and in part from new units raised in mechanical engineering centres, such as Sheffield, Leeds and Birmingham. They were armed with the old 15 pr. converted into a quick-firer.

The question of officers, not only for mobilization but for peace

time also, had become serious. The old sources of supply were no longer available, owing to the superior attractions offered by a business career. To supplement the output of Sandhurst and Woolwich, a number of regular commissions were given annually to British and Dominion Universities, and to train men for reserve commissions the Officers' Training Corps, absorbing some rudimentary organizations already in being, was founded in the Universities and Public Schools, with an additional unit for London.

Of great importance also was the reorganization and extension of the Army Medical Service. That for the Regular Army was enlarged and organized on modern scientific principles. For the Territorial Force a new scheme was framed, the *personnel* for which was to be recruited from civilian doctors, surgeons and nurses, and the staff and equipments of field hospitals were prepared for use on the outbreak of war.

The foundations of the Flying Corps were also laid. While maintaining general control, Lord Haldane delegated the main responsibility for this to General Seely, who eventually succeeded him, and to the then young and unknown officers who had given their careers to the new service. In this he was influenced partly by the necessity of economizing his own time, which was already being used to the full, and partly by the sense that a new and growing limb would develop best if it were not too closely tied to the main trunk of official authority. The event fully justified him. Criticism at the time was chiefly to the effect that insufficient encouragement was being given to inventors and manufacturers. Certainly in the early stages the policy deliberately followed was to trust rather to science than to commercial enterprise, and in this the trend of Lord Haldane's mind may be clearly seen. The National Physical Laboratory and the Royal Aircraft Factory were valuable aids to the Flying Corps and ensured progress on even lines. Mention should also be made of the National Reserve, which formed a register of men who had had previous military training and undertook to offer themselves in case of emergency for re-enlistment or for garrison duties at home.

Finally, a directive power was supplied to the machine in the shape of the new General Staff. This had been established in the War Office by the preceding Government, but it fell to Lord Haldane to give it form and substance, and there was no part of his work which he approached with greater zest or to which he attached a higher importance. His task was to extend its organization throughout the commands and to direct its energies into proper channels. This was done by September, 1906, and subsequently,

with the assent of the Colonial Premiers given at the Conference of 1907, it became the Imperial General Staff. An Inspector of the Overseas Forces was appointed to visit the various Dominions and report on the growth and efficiency of their forces, and an interchange of staff officers was carried out. By this means unity of organization and uniformity of ideas were secured without curtailment of independence, and when war broke out the Dominion Forces were incorporated naturally and easily into the divisional organization of the British Army. In defining the functions of the General Staff, great care was taken to limit its authority to strategy, tactics and training. Routine administration and direct supervision of supply, as the example of the South African War and the practice of foreign armies demonstrated, are no task for a commander in the field, and a delegation of duties was essential, not merely for the fixing of responsibility in case of failure but for the prevention of failure itself. The distribution of staff duties laid down in the Field Service Regulations, Part II, worked in war-time with uninterrupted smoothness, and to it must be attributed the exceptional success with which the supply of men, munitions and food was maintained to our Armies in the field. The same principle was applied to the Territorial Force, the task of administration being delegated to the newly-formed County Associations, which did their duty most efficiently on mobilization and relieved the War Office of a mass of work in raising and equipping new troops for war. Two further points specially characteristic of Lord Haldane's ideas were that a course was instituted for administrative officers at the London School of Economics and that on the training side systematic provision was made in each year's Estimates of a special fund to be expended by the General Staff on exercises and manœuvres at its complete discretion. This contributed at least as much as any other factor to produce and to maintain the exceptional quality of the Expeditionary Force.

The two governing conceptions of these changes, both novel in our military history and both constantly enforced by Lord Haldane, were the separation of training from administration, and the organization of the forces on a basis not of peace but of war. Rapidity of mobilization and concentration was the object in view and the test applied at every stage of reform. The event proved that in this respect at any rate the plans were well laid. On the day before the declaration of war, Lord Haldane, at the request of the Prime Minister, went to the War Office for the last time, and under his authority the precautionary steps were taken and twenty divisions of British troops were mobilized complete in all arms. The

Expeditionary Force, with the exception of a part which was withheld for a short time, was dispatched without hindrance from without or delay from within, and reached its destination according to the previously prepared time-table. A 7th Division, formed of troops drawn from stations abroad, was mobilized shortly afterwards. The Territorial Force was mobilized within two days, and the deficiency in its numbers soon made up by the return to the ranks of men who had been through its training.

From the point of view of efficiency, the Army as a whole, in the opinion of those best qualified to judge, was not merely better trained and better equipped than but different in kind from any that this country had ever produced. If morale and the other fighting qualities be included in the calculation, it may be said that the Expeditionary Force was the finest military product that has ever taken the field in the history of the world. The scientific organization of the medical and sanitary services saved countless lives, economized man-power, and served as a model to the Allies. The Officers' Training Corps, with its 24,000 cadets, provided the officers for the new Armies at the beginning of the war. Last but not least, the Territorial Force, far from requiring the six months' training posited in pre-war plans, was called on to send many of its units not only to India but into the field well within that period, and these acquitted themselves so well as to win special commendation from Lord French, the then Commander-in-Chief. Although still suffering from the undeserved depreciation of its former critics and largely ignored in Lord Kitchener's original plans, the infantry rapidly reached the then level of regiments of the line, while the artillery and yeomanry performed valuable services both passively in the Mediterranean garrisons and actively in Egypt and France.

These are now matters of history, but the reforms of which they were the fruit were not carried without opposition. The innate conservatism of the pre-war Army, the traditional pride of long-established organizations, amounting almost to the power of vested interests, had to be either placated or overcome. Apart from this, the financial position of a War Minister, which in this country has never been enviable, was in 1906 one of particular difficulty. Lord Haldane had to face a House of Commons with a large majority of his own party pledged to retrenchment. There was no opportunity for evasion. Objections had to be either fairly met or frankly admitted. The Estimates were eventually reduced, but by the method, not so simple as it might appear, of excluding everything which did not make for military efficiency. The long debates recorded in the columns of Hansard which led to the passing of the

Territorial and Reserve Forces Act of 1907 are but one illustration of the energy and the clear-sighted determination which Lord Haldane brought to bear. But the more important preliminary work had already been done behind the scenes. Those who were in the War Office during that time will recall many stories showing the eagerness and resourcefulness, the philosophical subtlety and practical capacity, with which Lord Haldane converted the military opposition to the support of his schemes. Lord Haig's dedication, already quoted in part, continues as follows: "In grateful remembrance of his successful efforts in organizing our military forces for a war on the Continent, notwithstanding much opposition from his Army Council and the half-hearted support of his Parliamentary friends." Lord Haig knew better than most men how serious these obstacles were and how much courage and pertinacity were needed to overcome them. It is enough to say that in the end Lord Haldane was able to approach Parliament with an acquiescent Army Council, a large body of expert opinion, and considerable political support at his back.

In the course of discussion two main criticisms of detail emerged. The first concerned the Infantry. There Lord Haldane found certain battalions of the line which had been raised for the South African War, but in time of peace could not be brought up to establishment. There were eight in particular, with an average peace strength of about 500 instead of 750, which could only have been mobilized with considerable difficulty. Drafts for India could only be obtained by the offer of bounties, and at the same time there was less success even than before in applying principles of the Cardwell system, under which any battalion abroad was to be fed with drafts from a linked battalion of the same regiment at home. By 1909 the seventy battalions at home had become seventy-four through the transfer of four from abroad, thus duplicating the seventy-four remaining abroad, and for the first time in history the Cardwell balance was brought into being. The eight new battalions and also a new battalion of the Scots Guards, which were needed neither to give the Expeditionary Force its due proportion of infantry, nor to maintain the Cardwell balance at home, were broken up and the men allowed to join other units or pass into the Reserve.

The second criticism affected the Artillery. As applied to fighting strength, this charge was so grotesquely untrue that if it had not received support in influential quarters, both in Parliament and outside, it would deserve no mention. The facts are simple. In the case of the Royal Garrison Artillery in distant parts of the world,

Lord Haldane found himself in a position, with the full concurrence of his military advisers, to reduce the *personnel*. This favourable opportunity arose from two circumstances. One was the arrangement under which the defences of Halifax and Esquimalt were transferred to Canada. The other was the re-arming of our own and the Colonial coast defences with more modern guns, which required fewer men to work than the guns which they replaced. It should further be observed that this change was due to a recommendation of the Owen Committee, appointed before Lord Haldane took office. But a more important question arose in connection with the Royal Field Artillery. Here the facts are equally simple and equally incontrovertible. In 1906 there were ninety-nine home field batteries, of which sixty-six were required to mobilize the then Field Force. Owing to lack of reservists to complete the ammunition columns, only forty-two of the required sixty-six batteries could be mobilized, and this could only be done if men were taken from the other batteries to fill the gaps. By 1909, through the automatic increase of the Reserve and the creation of the Special Reserve, the War Office was in a position to mobilize the sixty-six field batteries complete, and had also added to the Field Force six howitzer batteries of a modern type. The remaining thirty-three batteries were at first used for training the Special Reserve; but as the old Reserve increased, the number so employed was gradually diminished and those thereby released were used either for extra howitzer batteries or for special instructional purposes. Eventually by 1912, in place of only forty-two batteries capable of mobilization, there were eighty-one. Correspondingly, the *personnel* available on mobilization had increased from 38,725 men to 54,865. It is evident that there was in fact no reduction, and that the actual mobilizable strength was greatly increased. When further it is remembered that a valuable addition to our artillery resources had been made in the creation of the Territorial Force Artillery, the case becomes even stronger.

Apart from these criticisms of detail, there was a more formidable body of opinion represented by those who believed with Lord Roberts that conscription was the sole remedy for our military weakness. The argument which Lord Haldane had to meet was that the reforms begun in 1906 were excellent in intention and in execution but fell short of what was required, that the change in our foreign policy which was slowly effected during Sir E. Grey's tenure of the Foreign Office should have been accompanied by a corresponding change in our military establishment, or, in other words, that a system of Continental alliances demanded an army on the

Continental scale. A more detailed answer to this argument will be found in what follows ; but here it may suffice to say that there was no such system of Continental alliances as has been asserted. War policy is governed by foreign policy, and our preparations were fully adequate to meet such obligations as we had undertaken. The primary one was, of course, the maintenance of a supreme Navy with an effective command of the sea. The secondary one, to send the Expeditionary Force to the assistance of France, if the Government of the day should so decide, was punctually and completely performed. Our own interests, as well as those of our potential Allies, defined by the French General Staff, were conserved in the protection of the Channel Ports and the north coast of France. It was the Expeditionary Force that saved them, and the fact that the margin by which they were saved was extremely narrow cannot fairly be attributed to any miscalculations originating in this country. Only by a misinterpretation of our foreign policy and of the principles of Imperial defence could more have been demanded of us than was actually performed. Some, however, gave a wider scope to the argument and contended that if Great Britain had had an Army on the Continental scale, that is to say had adopted conscription at some date unnamed, the war would have been prevented. We are here moving in a region of hypotheses, and though the contention appears superficially plausible we may summarize Lord Haldane's views by saying that to his mind it involved two very disputable assumptions and was further open to two fatal objections. The first assumption was that Germany would have stood idly by and would not have struck at an earlier date than that which in fact she selected. The period of transition from a voluntary to a compulsory system would have found us at our weakest, and it requires some hardihood to maintain that Germany would either have ignored the implied menace or have refrained from taking advantage of the opportunity, as she did in the case of Russia in 1914. And if it be argued that conscription should have been introduced before the peace of the world was definitely endangered by German designs, that carries us back to a period when Lord Haldane had no responsibility and other Governments were in power.

The second assumption is that not merely Germany but our present Allies also would have viewed without alarm the creation by Great Britain of a vast Army in addition to her overwhelming Navy. Such an assumption contradicts experience. There might well have been such a re-marshalling of the main belligerents as would have left us compelled to fight alone against a united Europe.

To proceed to the objections, the first is admittedly not one of

principle but of political possibilities. No Government could have proposed conscription in time of peace with any prospect of retaining the confidence either of the House of Commons or of the country. It was always easy for patriotic persons to descant on dangers, real and imaginary, and to cry for large armies to be created in a few weeks or months ; but it cannot be doubted that the Government and the party which adopted such a cry would have suffered swift and immediate extinction. The proposals actually put forward were for home defence only, and part of the difficulty was that any argument in their favour could be converted into an argument for a stronger navy. The fact that under the stress of war the country consented to conscription proves nothing, and, if the circumstances are examined, shows that only so could consent have been obtained. In both cases the policy followed was dictated by public opinion, and in both public opinion was found to be correct.

The second objection is purely military in its character. After 1906 the problem of Imperial defence was by the General Staff considered and discussed from every point of view, and the solution of conscription was ultimately rejected, as Lord Haldane often stated, with military concurrence and for military reasons. The experience of other countries showed that under a compulsory system it was difficult to secure adequate forces for service overseas, and though in the case of Great Britain, by the offer of inducements, sufficient men might possibly, according to some opinions, have been obtained to supply the needs of the Expeditionary Force and the overseas garrisons, yet there would have been an interval during which the supply would have been seriously diminished. The interests of India, the Colonies and the defended ports would have been temporarily endangered. Apart from this, the country would have been called on to make large provision for barracks, depôts and store accommodation, to say nothing of munitions and equipment, which would have required sacrifices in other directions. Further, the necessary staff of officers and non-commissioned officers for the training of the new troops would have had to be produced. This also would take time, and though in war improvisation may be relatively rapid, in peace these indispensable factors could not have been created except over a period of years. Inevitably they would be drawn from the regular voluntary army, and thereby its readiness for the field would be destroyed. The best opinion was that it would take at least fifteen years to complete the conscript army, and that during half that time we should be appreciably weaker than before. Conscription was a possible policy, but from the military point of view only possible during a period of assured peace, and

to the military mind no such period could have been designated between 1906 and 1914. In fact, if conscription was necessary for the salvation of the country, it should have been adopted certainly not later than 1899. These are the reasons which are believed to have determined the General Staff of the day "reluctantly but very firmly" to content itself with bringing the Expeditionary Force to the highest point of efficiency and developing the Territorial Force as a second-line Army within the limits of the voluntary system.

This may be considered by some as an inadequate summary of a half-forgotten controversy, though probably by most as an apologia where no apologia is needed. It is at any rate a faithful attempt to interpret the mind of Lord Haldane as shown in his recorded utterances. The wide range of his intellectual activities is well known, and this is not the place to attempt an estimate of the lawyer, the politician, the philosopher or the man. In all these capacities he showed a devotion to the public service perhaps not equalled in his generation. His idealism and his speculative interests could never be concealed for long, but could be suppressed if necessary. At the War Office, as administrator of the cumbrous military machine, he made it his unvarying aim, though it may not always have been obvious to those unversed in his ways, to reduce the abstract to concrete terms and to make practical conclusions follow on precise thinking. And whatever latter-day opinion on minor points may be, there is at least general agreement that he well and truly laid the foundations of reform and that it was the Army as reorganized by him that made victory possible. Miscalculations of detail there were, as he freely admitted, but it would be difficult to point to any man who in 1906 had so clear a prevision of the future or was better equipped then and afterwards to provide against the coming danger. His best epitaph (and what War Minister could hope or wish for a finer ?) is that given to him, in words already quoted, by the Commander-in-Chief who used in the field the instrument fashioned in time of peace in Whitehall. It only remains to add that though the war reversed many old ideas and introduced many new ones, Lord Haldane's main conception persists unimpaired and the new developments follow the lines which he laid down. A small departure from his policy recently provided such immediate criticism from many quarters that it may be taken as the exception which proves the rule. Few reformers have had their plans subjected to so severe and so prolonged a practical test. It is not the least of the many proofs of their inherent soundness that the principles formulated by him have survived the war and are the basis of our military system to-day.

TRANS-INDUS PROBLEMS

SOME NEW ASPECTS CONSIDERED

BY LIEUT.-COLONEL G. M. ROUTH, C.B.E., D.S.O.

MEN may come and men may go, but our problem of the North-West Frontier of India continues.

Most nations have had their frontier troubles, and not a few have used them to learn the art of war. The Picts and Scots, Red Indian, Scythians, Philistines, Samnites and the Moros in the Phillipines, all call to mind different aspects of an age-old problem, each teaching some special feature. History's lesson is very definite. Grasp the nettle with a firm hand and a stout heart or strange things may befall.

Our own problem has two phases. The pacification of the tribes themselves ; and the trans-frontier aggressor as affecting the attitude of the tribes in the larger collision.

The first phase has in recent times undergone rapid change, owing to a latterly determined policy and to the march of science. The second has merely altered with the potentialities and ill-will of our possible adversaries, at the moment assuming very threatening proportions.

The Indian North-West Frontier extends 1,400 miles from Mekran to Gilgit, but only a comparatively small portion of this develops tribal problems, and still smaller portions, the two main passes, Bolan and Khyber, offer opportunities for an invader. The greater problem includes the less. Frontier pacification strengthens our defence against an outside foe.

The strip in which interest centres extends from Bajaur to Shorawak, about 600 miles, and includes familiar names like Chitral, Swat, Bāner, Mohmand, Zakha Khel, Tirah, Malakand, Black Mountain and Waziristan. It consists of the Trans-Indus mountain range 50 to 100 miles wide, known generally as the Pathan Borderland.

The Baluchistan or southern route for an outside enemy lies through an area definitely pacified by the self-policing methods of

Sir Robert Sandeman in the last century, coupled with reasonable communications. The northern area, as a result of a recent firm policy of occupation and road building, is in a fair way to achieve the same success. It is in the nature of our efforts here in the past and our lesson therefrom for the future that experience seems to lead in one definite direction.

Our objects here have always been to dominate the area in order to prevent raiding and to keep open the passes for trade, and also to maintain a friendly border land for our covering force or field army in the event of aggression from outside. Those happy days have gone by when we were only called upon to face the short-range *jezail*, and when our specialized frontier force with a few flanking parties could easily penetrate the most intimate tribal sancta ; days when the commander of an expedition called up his C.O.'s after the march and indicated with his cane a few dominant peaks in the vicinity, with the words "Piquet, Piquet, Piquet."

Now such a march must be conducted in the full panoply of war. The Pathan is the best shot in the world and his modern rifle forgives no mistake. To-day the main body needs a comparatively powerful covering force, ample reconnaissance, and strong, well-fortified piquets. No risks can be taken. The "burn and scuttle" policy has been succeeded by one of roads and lateral communications, and this remains the most important plank in our platform.

It is a truism to say that every advance of science as applied to war increases the advantage of civilized forces against irregulars. It follows from this that scientific methods should be exploited exhaustively in any struggle against savages, and that logically such exploitation should be cheaper and more humane to all concerned.

A study of our frontier campaigns during the last five years leads one to the conclusion that we might have done much more to exploit our scientific assets. Until the third Afghan War our policy lacked continuity, and at times was not even a policy at all, with the result that in 1919 we had to face in Waziristan, the main trouble centre, the "biggest butcher's bill," as General Jacob recently put it, in our frontier history. Thereafter Government embarked upon a serious road-building policy, which General Jacob goes on to describe as "in his opinion thoroughly sound, so long as it is continuous and progressive." He complains that in the Mahsud area two important parts of the country can only be reached with pack transport, the Shaktu valley and the Khaisera valley. No definite steps have yet been taken to ensure the lateral communication from Razmak to

Wana and Fort Sandeman, and this, now that the road from Thal to Idak is completed, represents the only important break in the northern area. Presumably all these roads, followed ultimately by railway construction, are contemplated by the Government, so that this good means of communication—the greatest advantage which we possess as compared with the tribesman—may be expected in due course to be completed. Tactically the difficulties encountered before the road is built, differ considerably from those to be dealt with in operating from a well-constructed main artery, but it is impracticable to discuss the two problems apart. In both it is arguable that some of our war lessons could be better exploited.

The basic protection when building the road must be infantry, and the nearer its training approaches that of the old frontier force, formed in 1849, the better. Tribal "die hards" who obstruct must be won over by money, or impressed by show of force or political guile. Each section of road begun must be covered by a suitable force and an adequate barrage on suspected points. The supply of such a force, through stony river-beds and country not really protected against sudden raids and sniping, is a problem of some difficulty. Beyond a few odd carts which can be dragged through boulders, huge strings of vulnerable and slow-moving camels remain the real means of supply. A frontier division of all arms including medical and transport means a daily maintenance of about 500 tons, say 2,500 camels for each stage of 10 to 15 miles, occupying about 5 miles of track in single file. We taunt camel contractors with retaining the saddlery used by Abraham, but they might well ask us in reply why we do not do more with our vaunted internal-combustion engine.

As a result of war experience, supply tanks now exist (on paper) in the active service equipment of a Royal Tank Corps Company at home to bridge the distance between railhead and the fighting units. These were used in France from 1917 onwards in the form of tanks of a mark considered obsolete for fighting purposes. The haulage capacity of tanks is very great, and anything up to three tanks were used for supply purposes. A large wheel with supply space suspended from the axle was also tried with (somewhat expensive) success, while in July, 1918, four supply tanks carried 25 tons of stores over roads which were nearly as badly broken up as frontier torrent beds. The comparatively short life (200 miles for the Mk. I, 400 for the Mk. V and 1,000 for the light Vickers), the need for adequate repair arrangements, the rattle, the fumes and the Indian sun all rule out these tanks for the problem in view. But

here we have the principle. In our conservative way we are apt to condemn the principle because the method of its application in France is not suitable for India, whereas we might more logically set ourselves to design something embodying the accepted principle which is suitable for India. Ditches, bombs and artillery call for a different design in track vehicles for France than the rocks, sun and bullets to be countered on the Frontier, which obviously present a much easier solution.

Before a metalled road is constructed on the Frontier the ordinary riverain tracks form the communications of the country. Pack transport follows the stony torrent beds, and has now and then to cross a watershed or diversion involving steeper gradients up to perhaps 30 degrees. Narrow ledges cut out of the side of precipices are the exception, for which legislation is superfluous. Let us suppose then that we can design a six-wheeler capable of being altered if required to a half-track vehicle with bullet-proof cover for the driver and engine, a Lewis gun for the spare driver, and a capacity of 3 tons, and suppose we arrange to escort these with a similar fighting vehicle fitted with wireless in front and rear, we have a column for which road protection as at present understood would be unnecessary. Ordinary sniping would be harmless, and in the exceptional case of a deliberate trap, help could be summoned on the predetermined wave length.

One hundred and sixty such vehicles at three tons load would replace the 2,500 camels, but, as they would cover at least double stages and not have to bring up their own fodder, probably 80 of them could replace 500 camels for a 30-mile stage. Also on ordinary gradients, if the larger boulders were removed, even these numbers could be reduced by the discrete use of trailers. It is the old problem of weighing up first cost of an expensive new measure in a country which cannot afford the army it needs, as against a high expenditure on camels and troops, only to be used in the case of emergency.

India has now definitely embarked on trials of the six-wheelers, Morris and Guy, so much in favour for mechanization at home. These with their attachable track arrangements, bigger front wheels, some form of cowcatcher for clearing smaller boulders and the armour now being tried out will probably provide a solution of the above in course of time. We cannot afford to lock up special vehicles only needed in some particular part of the Frontier in emergency. We must evolve something more adapted to its many needs, needs practically all of which differ from European ones.

One thing then stands out clearly : exhaustive experiment and research under realistic conditions, and preparation of the means to obtain in emergency the requirements evolved. Money so spent will not be wasted.

Unless considerable wear is to take place before the tank arrives at the centre of action, it will have to be brought up by rail, which is possible in most places at the moment on the North-West Frontier except Waziristan. The Kalabagh Broad Gauge bridge, however, is now sanctioned, and this difficulty therefore will soon be a thing of the past.

The above applies more or less to the fighting tanks, in that the product of European experience is not necessarily suitable for India. All the home types, even the Vickers, now on trial in India are much too heavy for tribal warfare, although possibly quite workable in certain less mountainous districts. Before the use of tanks is decided upon, suitable repair organization must be installed with spares and skilled fitters and one service entirely responsible. Yet the value of track or half-track armoured vehicles in a frontier advance cannot be over-estimated. As Colonel Keen (U.S.I.G.M. Essay, 1922) remarked, two tanks with three-pounders advancing up the Takki Zam in January, 1920, would have enormously reduced General Skeen's anxiety in forcing the Ahnai Tangi. Here again the six-wheeler with attachable track and armour (Mk. VII '303 proof) over vital parts must be worked out for the job, and it is believed this is being done, though not with the rapidity one might wish. Probably in the end a six-wheeler chassis will be evolved equally suitable for fighting or supply, something which can be subsidized in time of peace to cope with the enormous inter-village bus traffic now springing up all over India. Whether the armament of this vehicle should be a three-pounder, a Vickers gun and spare, or both, and what crew it would require, are matters for experiment and experience ; but presumably there would be room for different types of armament so long as the chassis were the same and therefore obtainable at mass production prices.

Two-men tanks may be found useful for escort and other duties ; they would have to be designed for this purpose, capable of being transported on a lorry to the scene of action and of moving on wheels or track. The advantage of such vehicles is the economy in B.O.R.'s, a precious asset in India ; but, on the other hand, the difficulties of driving in tribal territory are such that a spare driver at least would be essential as well as the gunner.

There is now the matter of gunpowder to consider. Long ago,

when we worked on the "close border policy" of "burn and scuttle," our rare expeditions into tribal country necessarily included pack artillery. It was the only kind of artillery possible, but surely in 1928 with metalled roads through the middle of Waziristan and the example of the German seventy-five-mile gun used against Paris, we might consider other views. Six-inch howitzers were used in 1921 to shell Makin as needed from Hutch Piquet near Ladha. 3.7 howitzers, carefully registered by day from intervening heights, were used to punish raiding in Warza village from Piazza Camp at midnight. The moral effect was excellent. Have not our lengthy mule batteries become in these days something of an anachronism?

We have in Woolwich certain 15-inch and 14-inch howitzers on railway mountings, and 12-inch long-range guns. The chances of these ever being used again in their original capacity is not great. Already one has been converted to a smaller calibre so as to fire a lighter shell at greater range. Suppose that Woolwich were now asked to reline a 12-inch howitzer with an 8-inch A tube, or even a 9.2 howitzer with a 7.5-inch A tube, and we then calibrated the resulting weapon, we should probably find that a range of 20 miles would give quite a reasonable span of life to the gun. The 50 per cent. zone, into which half the rounds would fall, would probably be far less fantastic than the visionary German effort into Paris, which must have involved a waste of effort quite out of proportion to the resulting effect.

Consider the effect of a 20-mile gun mounted in Razmak, where it could easily be brought by good metalled roads and satisfactorily mounted. It could dominate every single strategic point in Waziristan. Even the calibration with cleared ranges and aerial or flank observation would have a notable effect on backsliders in the raiding world. The knowledge that any thoughtless misdemeanour might mean a score or two of lyddite shell between midnight and morning into the ancestral shanties, might have a definite influence. It would be easier for the Razmak garrison to turn out an officer and five gunners at midnight than to mobilize a punitive brigade under the ponderous protective arrangements of hill warfare. Even an existing gun, the 6-inch Mark XXI, although not quite in the same category, would have definitely deterrent effect on raiding "die-hards." One or two such emplacements, with clearly marked ranges and trainings, on the circular road, would do many things a mountain battery cannot do.

Here it is interesting to compare American practice with ours.

The American portable 6-inch gun with split trail has a range of 26,000 yards. This gun has now also been mounted on a caterpillar tractor capable of travelling 15 miles per hour and climbing a 45-degree grade. Similarly, the 9.5-inch howitzer has been mounted on a tractor exerting no more ground pressure than infantry. The American railway mountings for 14-inch guns and 16-inch howitzers throw shells of about a ton to distances up to 25 and 30 miles. The 50 per cent. zone at such ranges may be unduly large, but the facts show potentialities.

Again, these or smaller guns could be used with chemical shell for definite purposes. We can no longer afford to be more squeamish than the New York police with their lachrymatory projectors. No one could object to a gas barrage of non-toxic properties to deny some strategic point to the enemy. No one could raise his hands in horror against a lachrymatory cacchinatoratory gas which forced out a coughing, spluttering party of men in ambush from their caves or nullahs and rendered them grotesque, laughter-stricken clowns, harmless as fighters for just so long as the convoy was passing and no longer. A dozen Livens projectors with some gas like chloro-aceto-phenone, innocuous except for the moment, would have saved many gallant lives in 1920. A few such gas-filled shells dropped into an offending village would exercise as much moral restraint as an avenging battalion. The influence of the women, here as always a potent factor in tribal warfare, would have added weight in preventing in future the cause of such punishments.

Hitherto smoke barrages have been little used on the Frontier, partly owing to the instability of smoke composition in India at temperatures from 0 degrees to 180 degrees. This is largely an administrative matter of experiment, inspection and storage. Many of our Waziristan retreats would have been far more bloodless if we had had a battery of Livens projectors, 4-inch, or even 3-inch mortars, ready for discharge at the right moment between the retreating forces and the danger spots. Thus the 6-inch stream line mortar bomb has a range of 4,000 yards and holds 60 lbs. of smoke mixture, the 4-inch of the same type, 1,800 yards with 72 lbs., and the 3-inch, 2,000 yards with 34 lbs.

The Livens projectors have a range of 1,800 yards and hold 30 lbs. of smoke mixture. They can be planted and discharged simultaneously in any numbers when retreat is contemplated. Titanium tetra chloride as used for writing sky signs is a useful smoke mixture for the purpose and has no toxic properties.

Here it is necessary to repeat that India cannot in such matters

rely entirely on experience in Europe. Titanium tetra chloride, for instance, relies for its effect on a percentage of moisture in the air, not always obtainable in the Pathan borderland. Phosphorus is the only smoke generator which has been found suitable for Indian conditions, and even phosphorus is inclined to play truant. The air currents in the north of India differ meteorologically from their European contemporaries, and the greater ranges of temperature induce air currents upwards which might mean that a smoke barrage would hang just above the useful position, and so lose its value. The same might be true of the lachrymatory gases. We do not know the conditions, and until we try them out we cannot rely on the lessons of Europe.

Star shells, too, have been through a period of disfavour, and Very lights or illuminating rifle grenades with their far more local action have taken their place. But the pendulum is swinging back. Star shell with five minutes parachute flares are now being manufactured in some numbers. Their action is far more heartening to our own troops and disheartening to the enemy than a semi-blind discharge of Very lights. They are also especially suitable in the 3.7-inch, our most useful frontier piece. To these various projects the objection cannot be put forward that the Indian soldier is being overloaded with highly technical weapons which will form his own undoing.

Another gunner auxiliary is the wireless telephone. Any one who has seen mountain batteries working with elaborate codes for visual signalling and laid telephone wires, must wonder why this simple and comparatively inexpensive innovation is not brought into use for F.O.O.'s and dispersed sections. Even if different instruments were used by each party for sending and receiving, the cost in a year would be repaid by the reduction of one British signaller.

Wireless for other units is equally necessary if less obvious. The sooner these are entered in our equipment tables, the better. It may be true that India desires to await the evolution of the ideal pattern before expending capital, but defence like an omelet means money and eggs. A few standard sets bought annually until a satisfactory pattern is achieved would mean immediate efficiency and training, followed by bulk supply when the need arose. Every frontier post and armoured car, too, should have broadcasting sets to disseminate information and make cooperation possible. India has not yet taken up seriously the possibilities of wireless on the Frontier. As regards armoured cars, a start has been made with two-valve sets between two moving vehicles sending and securing,

with a radius of 3 miles radio telephony and 25 with wireless telegraphy, extensible of course with improved aerials. There is an immense field, such, for instance, as loud-speaking propaganda from airships, a new weapon for political officers.

Television is yet in its infancy, but it should take its place in our frontier armoury. It is known that invisible infra-red rays can be projected into the darkness and that the televisor can then observe in this infra-red searchlight beam. The uses of such an invention even from a defended perimeter may be few, but with suitable propaganda might be utilized to have the moral effect of the supernatural.

Returning to more mundane matters, trench mortars have their tactical uses for brief opportunities, whether 6-inch, 4-inch or 3-inch. For the moment in disfavour owing to prematures, they yet remain accepted weapons, and stream-line shells with ranges up to 4,000 yards have been worked out. They will be our servants as soon as war becomes serious.

Coming to the infantry soldier, the 54 percussion grenade for hand or rifle will give civilized man a real advantage over the tribesman, an advantage too often denied him with the No. 36 and its time fuze. The range from a rifle is 700 yards, which will have special value in searching reverse slopes during an attack.

So far, except where the Pathan can steal an odd grenade to disturb a piquet, the advantage lies with civilization. Not so the rifle, as those who have tried to salve camels under fire from snipers 1,200 yards off near Wana realize only too well. Here fire discipline is our main advantage until a satisfactory automatic rifle is produced. Of present-day type the Browning seems to be in favour, but the Americans are in this matter ahead of us. They fix graticuled binoculars to their Brownings and so with the stream-line bullet can produce gun effect at 2,000 yards. Their 300 boat-tailed rifle bullet has an extreme range of 5,700 yards, which gives possibilities of accurate fire at very long range with telescopic sights. In this respect, however, we with our Mark VI rifle and stream-lined bullet which is now being tried out, are probably not far behind. Another weapon used by the Americans against the Moros in Mindanao is the trench gun, a buck-shot 12-bore with bayonet, not open to the objection of losing a high velocity rifle to the enemy. This weapon can also be used to discharge a 12-bore Very light. No one knows why such an obvious weapon, which is on sale in every gunshop in India, has been so often discredited and turned down.

Other scientific "jims" will occur to the reader. The live

wires so successfully used to prevent interference with signal lines might well be adapted to discourage tribesmen from creeping through barbed wire. Of directional wireless and the death ray it is too early to speak, but if we would save lives, such advances of the age must be controlled systematically to serve our ends.

Of course, when all is said and done, training, covering fire, good intelligence and the seizure of vantage points remain the key word, on the Frontier as elsewhere. But one cannot help feeling that there is an old school of "diehards" who still consider such new-fangled weapons as have been referred to above a regrettable lapse from clean fighting. But happily this school is wilting, and conservatism in the Army, owing perhaps to the vigorous band of ambitious soldiers who came to the front in the war, is for the moment in the minority. May it long remain so.

It remains to consider war in the air. In Razmak the landing ground allows of rapid action against all points in Waziristan, the most critical area. But Razmak is high, and this decreases the load. Armament, *personnel* and machines deteriorate in the climate. Air pockets are common above the barren hillsides, and, lastly, the best aeroplanes do not always find their way to India.

The uses of the aeroplane are not limited to bombing and machine-gun action; they can drop political agents behind the line, transport troops or revictual posts in inaccessible places. The low-powered glider is already in sight for personal reconnaissance work, as also the helicopter attachment, which makes an airman independent of prepared landing grounds; but India is chary of adopting these new developments until well tried out. It has been found in Kurdistan that dropping supplies from aeroplanes without landing has its objections. It might suit a bale of socks, but would prejudice the value of a Lewis gun rather seriously. A solution which has been tried out in Germany with some success is a string of gliders carrying the freight behind the aeroplane. These are released at the required destination just as carriages are slipped on a railway. This method of provisioning from a moving aeroplane is worth experimenting with in a country like India, and possibly some form of catapult to counteract the forward motion could be devised. The unusual difficulties of communication in India clearly point to the desirability of such experiments, and it would seem worth while spending money on them even in these hard times.

In the opinion of the present writer, however, the form of aircraft which seems most suited for frontier work is the rigid or semi-rigid airship, with a suitable arrangement of landing masts. These

with bullet-proof cars would operate slowly for purpose of intelligence, propaganda with loud speakers, bombs and machine guns. Men could, if necessary, be terrorized at leisure and herds wiped out from close range. Cooperation with infantry might replace artillery preparation, and snipers invisible from the main body would fall an easy prey to the hovering airship proofed against rifles by multiple gas chambers and self-sealing devices. Flank guards could be nominal. Airships could show the flag, rescue over-zealous political officers, and provision isolated posts more cheaply by far than at present contemplated.

Most of the above weapons (except the heavy guns) can be used to a varying extent whether the road is built or not. When once the metalled highway with its immense pacifying permanence is finally completed other weapons will come into play.

At the moment trade-pattern lorries for supply and armoured cars are in use, but for anything approaching a large force the wear and tear on the roads is disastrous, especially with solid tyres. Double-tyred pneumatics were used on the rear wheels on the Italian Front in the Piave valley, and by us in Mesopotamia; and in Waziristan we reduced 3-ton lorries to 30-cwt. loads. Both these devices are a confession of road-building inadequacy, a confession which would probably justify a trailer system or a light railway. In recent years the 6-wheel lorry with 12 tyres has been tried out, and this, with trailer, will probably meet requirements until such time as a railway becomes economically possible.

A completely satisfactory armoured car has not as yet been found for the work it is required to do in India, but there is general agreement that the six-wheeler will sooner or later meet all requirements.

It would hardly be worth while to replace the Crossley and Rolls Royce cars with anything else, but it is to be hoped that the six-wheeler chassis will be adopted for armoured car work.

It might be possible, also, to utilize the 18-pounder on protected motor mounting, so that it could be made to travel at high speed and so deal with threatened points. This type of mounting has already been fully developed, but we do not yet see it in India. On parts of the Frontier, armoured cars can leave the road and be employed like cavalry and horse artillery in charges or turning movements.

The above suggestions touch on some of the changes which military science as we know it to-day might bring about in the frontier country. No doubt unexceptionable reasons exist why

one or other of these suggestions cannot be put into effect, but the recital of such a long list of things which have not even been tried out makes one wonder if our methods are sufficiently enterprising. Are we not declaring clubs on a strong no-trump hand? or taking a long hill with two cylinders missing?

The answer can, of course, be summed up in the one word money, or rather the lack of it. The block vote of fifty-four crores cannot be exceeded, no matter how attractive the proposition, and the authorities in India have to decide how the money can best be spent. It is hard for a well-brought-up soldier to prefer a machine to a bayonet, but, sooner or later, the man *versus* matter issue must be faced or our enemies will steal a march on us.

There remains the question of operations against an external Power, which has seriously exercised the Government of India since the Penjdeh incident in the demarcation of the Russo-Afghan frontier in 1884. Since that date the policy of maintaining Afghanistan as a buffer State has been steadily followed and reached its logical conclusion in 1893, when the Afghan frontier was extended by the Pamir Boundary Commission to be contiguous to China at the Mustagh range. Although there is thus no direct contact between Russia and India, this zone has a somewhat academic value. No Russian force could advance, nor has any force in history succeeded in advancing, over the Pamirs. Forces have entered India unopposed through the Kurram (which is watched from Kohat) and Wana defiles, but no considerable army can or will approach India except through the Khyber or Quetta. It must be remembered that modern armies of any size require railways. The Russian lines to Merv and Kushk and to Termez are single and would require doubling. Roads of approach from any possible base at Herat are not constructed, as a matter of policy, so that definite operations would require months of preparation before any attempt could be made to bridge the inhospitable 400 miles between Peshawar or Quetta which directions such roads as exist follow.

As regards the Bolan Pass, the words of Sir Thomas Holdich in 1906 still hold: * "The natural surroundings of Quetta can only be approached from the north or from the south. On the north, at Baleli, in the narrow exit from the Quetta plain into Peshin, between the steep, scarped walls of Takatu and the rugged foothills of Nashelak, are defensive lines of about four miles in length, which by the light of recent experiences in South Africa, may justly be called impregnable. An advance from the south assumes an open

* See "The Indian Borderland," p. 50.

road from Sistan to Nushki, and unopposed progress through the narrow valleys and intricate hills that lie between Nushki and Quetta, where strong defensive positions may be found every few miles of the route. The Quetta position is not only one of remarkable natural strength, increased by scientific development, but it is one of infinite further possibilities." So much for the southern gateway.

The northern or Khyber route is also one of great natural strength.

In this connection we can refer to the failure of our attacks on the Doiran front in Macedonia in 1917-1918, which proves that it is almost impossible to break a strongly fortified position in mountain country where the defence is well supplied with artillery and trench mortars. The only hope is to find a weak spot in what appear to be impassable heights and then to turn the position. But even such tactics can be dealt with if the defence has reserves. In the Bulgar collapse of 1918, these reserves had already been thrown in to defeat the British at Doiran. Once such attack is repulsed, the attacker's position becomes extremely critical. In 1918 the Bulgars, owing to their main communications in the Vardar valley being cut by the Serbs, had only one road winding over the Belshitsa to retreat from Doiran. Our aeroplanes attacked the head of the retreating column, which in trying to turn about became completely jammed. The aeroplanes were then able to pour down machine-gun fire from 100 feet and so reduced the enemy's force to a terrified rabble.

So much for direct attack through a buffer State, but the "Defence of India" brings out the position if Soviet influence were to extend to Afghanistan. Lenin at the Third International at Moscow in 1920 emphasized the fact that England and British Imperialism were Russia's worst enemies. "In India we must strike them hardest." The Bolsheviks have sovietized Bokhara by their insidious methods, and if they were to succeed in Afghanistan India's position would be far from enviable. Our insulating State would then harbour communistic agencies and anarchic elements whose exploitations would infinitely aggravate our border troubles. Diplomacy could avail little against Soviet deceptions, and the Russians could advance their railways and build up gradually all the base resources required for a modern war.

It is not generally realized how thoroughly the Bolsheviks are exploiting Afghanistan. Rail and road surveys are being feverishly carried out in the north, where the tribes not being of true Afghan lineage are more susceptible to the subtle Soviet propaganda.

They see over the Oxus the apparently contented republics of Turkmanistan, Usbegistan, Tajiikistan and Kara Kirghiz, for each of these States is suitably pampered by the Bolsheviks until the march of events shall render such altruism needless.

Here, a mere 50 miles north of Kabul, Russian engineers and merchandise everywhere meet the eye. Russian aeroplanes are continuously in the air and very intensive air training is being carried out in Kabul, where a large new aerodrome is being constructed on the ruins of the old Sherpur cantonment. There is a modern landing ground at Jelalabad, exactly 65 miles from Peshawar city.

It must not be supposed that India on her side is doing nothing to counter this Russian influence. British prestige in Kabul has never been higher, and is strikingly superior to that of Russia, but, nevertheless, the problem remains a serious one.

A FRENCH GENERAL ON THE B.E.F.

A BOOK by General Huguet, who for the first seventeen months of the war was head of the French Mission attached to the General Headquarters of Field-Marshal Sir John French in the field, should command attention.* Unfortunately it turns out to be far from authentic, and still more unfortunately it is not calculated to improve the relations between our Allies and ourselves. It reads like the book of a disappointed man. It begins correctly enough :

“Written in the course of the years 1921 and 1922, it has not been modified since † . . . it appeared preferable to defer publication until the principal actors in the drama on the British side had disappeared.”

But there General Huguet's discretion and discrimination come to an end. He says both too little and too much. Although he must possess both personal and official knowledge of events, he has based his narrative of the war mainly on other people's books published soon after the termination of hostilities. Although in the six years which have passed since he completed his MS. the French, British and German official accounts of the early part of the war and other authoritative books have appeared, and the many war legends which he includes have been discredited, he has not seen fit to correct the very erroneous account which he presents, or to alter his judgments. His object appears to be to exhibit to his countrymen what a difficult ally the British Empire is, how tiresome its officers—particularly Sir John French—were to deal with, how small the effort made by the B.E.F. was, and how grudgingly its assistance was rendered. Perhaps the best comment on the book is that he himself shows that France expected little of the British Army, that the military arrangements made before the war never contemplated the sending to France of more than a British expeditionary force of 150,000 men, and that by the time General

* *L'Intervention Militaire britannique en 1914* (Paris, Berger-Levrault, 20 francs).

† He, however, refers to Macdiarmid's "The Life of Lieut.-General Sir James Moncrieff Grierson," published in the middle of 1923.

Huguet ceased to be head of the Mission, at the end of 1915, the B.E.F. had suffered casualties, more than double 150,000, amounting to 15,636 officers and 359,335 other ranks, of whom a total of 55,521 were killed. Further, one of the greatest of French military historians, General Palat (Pierre Lehautcourt), has suggested the reason for the caution of the British leaders in the early days. He wrote in his volume on the battle of the Marne : " It seems likely that their confidence in themselves, and particularly in us, had suffered in the first encounters, which were so little encouraging." The utter failure of Plan XVII, the hesitation at the battle of the Marne, and the waste of French life in the ill-advised attacks in Artois, Champagne and the Argonne in 1915, were indeed calculated to wreck any faith in French strategy and tactics.

The opening part of General Huguet's book, however, is of great interest. At the end of 1904 he was appointed Military Attaché in London :

" The British Army at this time was considered at the French Ministry of War as a somewhat out-of-date organization, and no one thought that it would ever be of the slightest use to us from a military point of view. Thus, on quitting Paris, I was not given any special instructions as regards my new duties.

" This opinion had been shared by my predecessor ; during the few days which we passed together whilst he was handing over and introducing me to the various military authorities, he did not conceal his feelings as regards the Army to which he had been attached in the Transvaal during the South African War, and which he judged was fitted only for police duties or small colonial expeditions. . . .

" From my very first contact with it [the British Army] I became convinced that the South African War had been a remarkable school of instruction. At that time I do not believe that there was a single army in Europe in which the training of the lower cadres was so far developed and in which the soldier—in the cavalry as well as in the infantry—knew so well how to make use of his weapons and utilize ground. His clothing and equipment were such that they were soon copied by the greater part of the continental armies. The experience of the war had amongst other things taught all officers the fundamental importance of liaison within each arm and with the other arms ; the tremendous effect of machine-gun fire ; and the value in battle of long-range, large calibre guns. Thus, whilst we thought that the 75 mm. field gun would be sufficient for most battle tasks, each British division—besides its field guns, the projectiles of which were heavier and more powerful than ours—was provided with eighteen large howitzers of 4.5-inch calibre, firing a 35-pound shell, and four long guns with a range of 10,000 yards, with a shell of the same weight as the howitzers. . . . An army which had understood how to make such good use of the lessons of a war was not to be despised, however small the number of effectives it could put into the field."

General Huguet began to think that the British Army might become of great assistance when the day should come for the struggle between France and Germany to be renewed. In the course of the autumn of 1905 he began to work out what force Great Britain could mobilize and transport to the Continent. He put it as 150,000 men, all of whom, however, would not be disembarked before the 30th day of mobilization, too late to take part in the great opening battles.

Soon after, in a private conversation with the late Lieut.-General Sir James Grierson, then D.M.O., he learned to his astonishment that the British General Staff was at work on the very same calculations.* He reported this to his Ambassador, M. Cambon, who, early in 1906, obtained the authority of the French Government to open semi-official *pourparlers* on the subject with the British Government. Sir Henry Campbell-Bannerman being Prime Minister, Sir Edward Grey, Minister for Foreign Affairs, and Mr. Haldane, Minister for War, it was arranged that "the studies begun separately should be pursued in common between General Grierson and the French Military Attaché, but under the double reserve that they should be carried out with the greatest secrecy and that in no case should they constitute an engagement for the British Government."

The work was begun at once, but in October, 1906 (the author says July, which is incorrect), General Grierson, who had occupied his post for only two and a half years, was removed to the command of a division at Aldershot. General Huguet has the curious taste to label Grierson's successor as "a general officer of timorous character, little inclined to take responsibility, who never once discussed with me the work that was to be executed in common. It was nevertheless (*néanmoins* !) pursued beneath him in concert with the officers of his sections." Which seems, in view of secrecy—Lord Esher, according to the author, warned him to enter the War Office by a back door—to have been a proper course. The ports of disembarkation, Boulogne, Havre and Rouen, were fixed, and camps selected, and in 1908 the time-tables of the railway transport of the troops were drawn up. In 1910 the late Field-Marshal Sir Henry Wilson became D.M.O., and "the work was remodelled taking as the zero, not the date of British mobilization, but the date at which it was necessary that the concentration in France should

* In a letter to Mr. Macdiarmid, the author of "The Life of Lieut.-General Sir James Moncrieff Grierson," quoted in pp. 213-15 of that book, General Huguet gives a slightly different account. There he says that General Grierson was only an *auditeur* of his ideas.

be finished,"—which entailed a reversal in August, 1914. Various other matters, such as the organization of a corps of interpreters, cipher codes and "a thousand other details," were settled. At the beginning of 1912 General Huguet left England to take up command of an artillery regiment, and was informed that his mobilization appointment was head of the French Mission at G.H.Q.

The second and principal part of the book is an account of the British operations in France in 1914-1915. Outside five personal incidents which he recounts, it is an inaccurate narrative mainly dealing with the events up to, and during, the battle of the Marne, founded on books published before 1922, as already mentioned. It shows a strong bias against Sir John French, and the inclination to believe that the British did not do as much as they could have done, whilst nothing in explanation of their operations is offered. Thus whilst it is correctly stated that General Joffre's orders for the Marne operations did not reach Sir John French until 3 a.m. on the 5th, it is not pointed out that, marching in the cool of the night, the B.E.F. had nearly completed its day's stage—and, for that matter, so had the French Fifth Army next to it—and the divisions must have arrived at their halting-places long before orders to stop and to retrace their steps could reach them. Nor does General Huguet mention that if the B.E.F. had been able to make two more marches on the 5th back to where Joffre appointed it to be on the morning of the 6th, it would alone and unsupported have encountered the whole of the German First Army (less its small flank guard). He does, however, admit that Joffre's instructions "bore witness to the spirit of indecision that then reigned at Grand G.Q. . . . Such instructions could only bring about mistakes and confusion and did not fail to do so." The B.E.F. may have been slow in its advance at the Marne, but it should have been said that the French Fifth Army on its right was slower and kept well to its right rear.

The battle of Le Cateau—a fair specimen of the author's accuracy—is described as beginning with "a long artillery duel; from dawn to midday the German batteries bombarded the trenches (*sic*); the British artillery, very inferior in number, replied as best it could, showering its projectiles on the masses of the enemy's infantry which it saw descending the heights in successive lines." Then "a fortunate attack (*sic*) of Sordet's Cavalry Corps at 4 p.m. contributed to slacken the pursuit (*sic*)."

It would take many pages to correct all the General's mistakes: he times at 10 p.m. the German order for retreat from the Marne (it was 11 a.m. for the Second Army; 1 p.m. for the First). He

allows no British troops to cross the Aisne before the 13th of September. There is the old legend of Foch preventing Sir John French from withdrawing from Ypres on Gheluvelt day.

That the French by retirement exposed the British left both at first and second Ypres is overlooked. There is no hint that Sir J. French fought Aubers, Festubert, and, above all, Loos, against his judgment and solely to comply with Joffre's wish and pressure—an appeal which, having been made to Lord Kitchener, amounted to a command. The only excuse for these later omissions is that in 1915, owing to the activity of General Foch in visiting Sir J. French, the French Mission at G.H.Q. and the British liaison officers at French headquarters were practically short-circuited and knew little of what was going on. In spite of Neuve Chapelle, second Ypres, Aubers, Festubert and Loos, the author speaks of British efforts in 1915 as *peu nombreuses*.

The personal incidents which he relates are his visits to London on the 7th and 12th–13th of August, 1914, to settle where the B.E.F. should concentrate. On the former occasion Lord Kitchener said, pointing out some officers at the end of his room: "They fancy they will be back here for Christmas. They are mistaken; they will pass not one but many Christmases away from home." It appears that Joffre's first plan was for the B.E.F. to cooperate with the Belgian Army on the flank of the Germans: only after the Belgian retreat towards Antwerp was it decided to employ it to extend the French front to the west. Plan XVII, we learn, was based on Napoleon's manœuvre at Austerlitz, in forgetfulness that the Emperor, having studied the ground, adapted his strategy to fit it, whilst in 1914 the ground was ignored: the Ardennes was clearly unsuited for the scene of a great counter-stroke to break the enemy's centre.

The next personal touch is General Huguet's delight at the fulfilment of his hopes of cooperation, on being challenged in the Forest of Mormal by a British sentry: but he gives his cry as "Who's there?"

He was present at the stormy interview at the British Embassy in Paris on the 1st of September, 1914, between Lord Kitchener and Sir John French. He "understood very imperfectly what words were exchanged," but was struck with the difference of the attitude of the two men: "One, Kitchener, calm, reflecting before speaking, weighing his words, master of himself, conscious of the great and patriotic duty he had accomplished; the other irritated, violent, his face congested, sulky and angry . . . like a prodigiously

spoilt child who, when things go amiss, is quite upset and lost."

Finally, he states that at a conference at Dunkerque on the 1st of November, 1914, between Lord Kitchener, the President of the Republic and Generals Joffre and French, the British War Minister proposed to replace Sir John French by Sir Ian Hamilton. The three Frenchmen "opposed this energetically, declaring that a Commander-in-Chief could not be relieved in the midst of a battle; such a step would produce a most disastrous impression on the troops." Throughout the book there are adverse comments on Sir J. French, e.g. "he always remained a hesitating and irresolute man, and his unsettled mind, tossed between the most opposite impressions and views, continued to render *entente* and cooperation with his Allies difficult and uncertain."

On the Aisne he is pictured as :

"At first full of enthusiasm in consequence of the easy successes gained in the advance, he gradually grew depressed on seeing the vain efforts of his troops to break through the enemy's lines and the losses which they sustained."

He goes so far as to blame Sir J. French for suggesting the reasonable precaution against a misadventure of digging back lines.

The author dedicates his book to, and reserves such praise as he gives for, the late Sir Henry Wilson, who, in the opinion of many, was—the C.G.S. being ill—at the back of all Sir John French's indecision, and his evil genius.

The last part of the book is called "After the War," and records France's surprise, astonishment and stupefaction at the failure of the British Empire to crush Germany utterly. "Instead of chastising the guilty, squeezing (*pressurer*) Germany, searching the bottom of her pocket to make her surrender her last centime, it was peace, a general peace that had to be obtained so that Britain might resume business as usual as soon as possible. Such was henceforward her sole object, to which she sacrificed every other consideration."

He adds that "France has lost confidence in her old Ally . . . and of the confraternity of arms which for four and a half years united the two nations—there is no question to-day." We beg leave to doubt this.

The last pages of the book are taken up with an estimate of the British character. We have "a peculiar mentality and habits, always very different to those of other peoples." Our "intelligence

is not very lively and is slow to awaken ” ; we are “ slow to understand a new situation and to adapt and to conform our conduct to it ” ; we have “ no sentiment and are strictly utilitarian ” ; “ our religion is only an attitude, which it is good form to observe in public ” ; “ morality and fidelity in marriage are only superficial sentiments, and the level of them in England is below what it is in many other countries.” Finally, he says :

“ the British character is simple and not very complicated. It may be summed up as powerfully animalistic, deeply personal and egoistical like that of all animals, and like it sacrifices all to the satisfaction of wants and instincts, without being diverted from it by any moral or intellectual scruple. Thus honest and simple in his daily life, the Briton rapidly becomes harsh, vindictive and pitiless if his security appears menaced, or his general and private interests are placed in danger ; all considerations then give way to the conservation of himself and his privileges.”

General Huguet thinks that the Empire is a colossus with feet of clay, and that the hour of its decline will not long delay to sound.

The book will hardly assist a Frenchman, as General Huguet says he hopes, “ to appreciate better the mentality of those who were our Allies of yesterday and will probably be our Allies of to-morrow.” If he has this purpose sincerely in view, it might be as well for him to read “ Englishmen, Frenchmen and Spaniards,” by Professor Madriaga, to re-study the war in the authoritative records, and to revise his book.

SOME GEOGRAPHICAL FACTORS IN THE CAMPAIGNS OF ASSAYE AND ARGAEON

(*With Map*)

BY J. N. L. BAKER

THE Maratha campaigns of Sir Arthur Wellesley in 1803-1804 were of great importance whether viewed from the personal or the political standpoint. They have already been described in detail * and any further treatment must be prefaced with a brief explanation. The reading of Wellesley's despatches within sight of the fort of Ahmednagar led the writer to examine some of the major geographical factors which influenced these campaigns, and enabled him to appreciate the difficulties and the success of the commander. The following reconstruction of events therefore gives first place to the geographical influences which, unlike the other factors, were continually if sometimes indirectly affecting the movements of the armies. Other factors cannot be neglected, but if they are not here stressed, it is because they have already received adequate treatment.

The campaign of 1803 may conveniently be divided into two halves. The first task of the commander was to get to Poona from Seringapatam in the south of India. The object of the march was to reinstate the Peshwar at Poona in accordance with the terms of the treaty of Bassein. This apparently simple task involved a very long march through imperfectly known country where supplies were scanty and over which Maratha bands had for long exercised a reign of terror.

The first geographical problem that called for attention was the climate of western India. The south-west monsoon wind which is prevalent during the months of June to October seriously interfered with shipping on the west coast, with the result that Wellesley had urged the importance of maintaining Seringapatam as a dépôt for the Army in the south-west.† These same winds brought heavy rain to the western rim of the Deccan, and so caused the flooding of the long rivers which flow from west to east across peninsular India. It was just this rainy season which Wellesley selected as

* See "History of the British Army," Vol. V, ch. 1 and 3, by the Hon. J. W. Fortescue.

† See Despatches, I, 343-354, esp. 347. Cf. III, 390.

"most convenient to commence a campaign with the Maratha." * The swollen rivers would be a check to the Maratha cavalry while the English, supplied with pontoons or country boats, would be able to cross at will.† A further advantage was that the problem of water supply, a serious difficulty in a semi-arid country, would be automatically solved. On the other side was the fact that the black cotton soil gets uncomfortably sticky in the wet weather and marching is rendered difficult, but this was to some extent discounted by the knowledge that "heavy rain for any long continuance is not to be expected in the Maratha territory."‡ This short duration of the rainy season helped also to lessen the attendant diseases which affected both men and animals at that time.

A second geographical problem was that of supplies. Not only did the Maratha country provide no rice, but it might not yield any sort of sustenance for man or beast. Lack of food was the common misfortune of armies operating in the Bombay Deccan, and probably was one of the predisposing causes of the raiding policy of the Maratha, whose land is always threatened with scarcity or famine. Wellesley may have had some such idea when he wrote that Holkar's occupation of Poona would have made the danger of raids into the Nizam's dominions serious "if only for the subsistence of the troops. It would not have been possible to draw subsistence for those numerous bodies of horse, for another year, from the countries between the Godavari and the Kistna." §

* See Despatches, I, 357.

† This was not an original idea on the part of Wellesley. The rise and fall of the rivers entered regularly into the plans of the Maratha generals. See Rennell, "The Marches of the British Armies in the Peninsula of India during the Campaigns of 1790 and 1791," p. 81.

‡ The following figures taken from "Monthly and Annual Normals of Rain-fall" (Memoir of the Indian Meteorological Dept., Calcutta, 1924) bear out this point. The upper figures give the mean rainfall and the lower figures the number of rainy days (i.e. on which 0·01 of an inch of rain, or more, falls).

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Bombay .. {	0·08 0·1	0·05 0·2	0·06 0·1	0·02 0·8	0·69 0·8	20·58 14·7	27·26 22·5	15·97 19·6	11·83 13·6	2·43 2·7	0·36 0·5	0·05 0·1	79·38 75·0
Poona .. {	0·09 0·2	0·05 0·1	0·05 0·2	0·60 1·2	1·42 2·2	5·35 8·1	7·20 12·4	3·68 8·3	5·07 7·5	4·01 5·0	1·11 1·7	0·23 0·5	28·86 47·4
Ahmadnagar {	0·17 0·3	0·13 0·2	0·10 0·2	0·23 0·7	0·92 1·9	4·57 7·3	3·61 6·7	2·77 5·0	6·84 8·9	2·78 4·4	0·83 1·4	0·55 0·07	23·5 37·7
Aurangabad {	0·25 0·4	0·12 0·3	0·20 0·5	0·19 0·5	0·76 1·4	5·83 7·9	6·83 11·4	4·68 8·9	6·37 8·3	2·06 2·9	0·69 1·0	0·48 0·8	28·46 44·3

§ See Despatches, I, 563. Cf. I, 508, for an earlier and similar opinion. The Governor-General in his letter of the 20th of June, 1803 (II, 23-5), wrote: "Destitute of any permanent resources Holkar is compelled to supply his exigencies by indiscriminate plunder."

Wellesley's troops were recruited in the south of India and would naturally be rice-eaters, so that the commander was obliged to provide rice in a country where practically no rice was grown. There were, however, three rice areas which usually had surplus stocks. On the west coast Canara normally exported rice and sometimes in such quantities that it was necessary to import this cereal from inland districts to supply local needs. Wellesley arranged to stop excessive export of rice so that not only would Canara have enough but her surplus might be sent to Bombay, and the surplus from other regions which would otherwise go to Canara would become available for the army.* Difficulties of communication made it impracticable to send Canara rice inland and up the difficult passes of the Ghats, so that the surplus from Mysore was used to supply the Army on its northward march.† Hyderabad might also be counted on to supply some rice if the need arose.

The solution of the supply difficulty intensified the problem of communications, for it was no light responsibility to feed an army five hundred miles from its base when the line of communication was liable to interruption. Thus, from a different point of view, the flooding of the rivers was of great importance. Nor was the difficulty lessened by the general ignorance which existed of the Maratha country. Its main features had been drawn by Major Rennell in his great map of India published in 1788,‡ and while this map was a great improvement on the work of earlier cartographers, it was based on rather scrappy and sometimes inadequate data. An inspection of the map shows that apart from a few main routes little was known of the surface features of the country. For the territory south of the Kistna there were more up-to-date sources of information which were used by Rennell in his map of "The Peninsula of India from the Kistnah river to Cape Comorin," published in 1800.§ So far as he was able Wellesley planned his

* See Despatches, II, 405. Supplementary Despatches, III, 530-1. Canara rice was an important item in Portuguese trade. Cf. Hamilton's "New account of the East Indies," in Pinkerton's "Voyages and Travels," VIII, 364-5. See also Viscount Valentia, "Voyages and Travels to India . . . in 1802-6" (London, 1809), 453-8.

† See Despatches, II, 433, 468.

‡ "A Map of Hindoostan." The map was accompanied by a most valuable memoir, a third edition of which appeared in 1793. This must be the map referred to in Despatches, I, 580, 584, and II, 12, but the request for an additional map (Despatches, II, 105) shows that Rennell's map was not suited for military work north of Poona.

§ The first edition of this map, published in 1792, was accompanied by an explanatory pamphlet on the marches of the Armies, quoted *supra*.

route to make use of the geographical advantages of easy ground consistent with as short a line as possible.* He provided for posts and depôts at critical points so that the stream of supplies should flow without interruption, and, at the same time, he encouraged the survey of the country so that its geography might be better known.†

Wellesley's march from Seringapatam to Poona was partly determined by the necessity of finding water and hardly at all by difficulties of food, except for the animals, without which no army could move. The supplies sent up from Mysore made him nearly independent of the country,‡ but he was constantly worried about forage. Having reached the Nira river at the middle of April, 1803, and made contact with Stevenson, he arranged to split up the Army again in order that all his troops might get forage and subsist with ease.§ The Nizam's troops were to remain on the Bhima, Stevenson was to station himself between this force and Poona, while he himself would "bring the Peshwar up the Ghats." Wellesley with the cavalry made a forced march and entered Poona on the 20th of April. The city was saved, the population regained confidence, and soon from that country where the Marathas had "not left a stick standing at a distance of 150 miles . . . [and had] eaten the forage and grain" Wellesley was able to report, "they have opened their bazaars, and we are well supplied. Forage is to be got but it is scarce."||

For the second phase of the campaign the Army depended partly upon supplies from Bombay, whither they had been carried by sea. This involved not only "clearing the road to Panvel ¶ of enemies," but also improving the difficult road which climbed from the coast to the Deccan by way of the Bhore Ghat.** Wellesley had stipulated that the Maratha forces must be withdrawn to the northward, and while negotiations were in process he so disposed his forces as to prevent a southward move on the part of the enemy. Stevenson was particularly charged with the defence of the Nizam's

* On the matter of roads, see Despatches, I, 358, 360.

† See Despatches, I, 59. Lambton there mentioned was Surveyor-General of India from 1800 to 1823 (Markham, "Memoir on the Indian Surveys," 2nd ed., 1878, pp. 60, 63).

‡ *Ibid.* I, 429, 432, 436.

§ *Ibid.* I, 491, 494.

|| *Ibid.* I, 506.

¶ Panvel was the depôt on the coast a short distance from Bombay.

** The mention of two passes of this name in the Despatches may lead to confusion. The first (I, 504) lay on the road north to Poona: it had delayed Wellesley's cavalry march. The second (I, 533), which carries the modern road and railway, was made practicable by the pioneers. On the "little Bhore Ghat," as the first of these passes was called, cf. III, 550, where it is described as "very bad."

dominions, which lay open to attack so long as the Godavari was low, while Wellesley himself remained near Poona to guard that town and keep open the road to Bombay, and assist Stevenson if necessary.* During this period a number of petty incidents showed the rather precarious position of the Army. Duncan,† the Governor of Bombay, failed to supply a bridge of boats, "most essential in this country so much intersected with rivers, none of which are fordable in the rains"; the cattle were "completely knocked up," so that out of 25,000 only 6,000 were fit for service, neither provisions, nor arrack, nor iron were sent up from Panvel, and Wellesley might with reason complain that "they are sending medicines, which, however useful, might have been deferred until we get other articles essentially necessary to our consumption or to enable us to move from hence." ‡

With the increasing probability of a break with Scindia and the Rajah of Berar Wellesley began to make plans for an advance to Ahmednagar. The geographical conditions, and especially the number and state of the rivers, again received much attention. But the march from Poona revealed an alarming state of affairs. The cattle though better than had been expected were unfit for work, and the commander reported on the 4th of June, "we cannot venture to cross the Godavari unless some cattle can be hired at Poona." § Forage was unobtainable. On the 5th of June he wrote, "we had no forage yesterday and none again this day. I shall march on in the hopes that as I get to a distance from Poona I may find something for the cattle to eat. Everything near it, excepting to the westward, has been consumed." || The following day prospects seemed better but a new misfortune had to be recorded. Rain fell and did "much mischief to our weak cattle. In short, nothing but the required assistance from Poona can keep us in the field." ¶ This dependence on Poona for cattle and for supplies made the capture of Ahmednagar, a fort "full of everything we want," a matter of some urgency, but, so long as he was at peace with Scindia, Wellesley dare not attack it. It says much for his moderation that he allowed negotiations to drag on until the beginning of August when he knew that inactivity of any kind was likely

* See Despatches, I, 556, 558.

† Wellesley's letters at this time give the impression that Duncan was either incompetent or obstructionist. For a more favourable view of the Governor, see Despatches, III, 365, and Valentia, *op. cit.* II, 105.

‡ See Despatches, I, 576.

§ *Ibid.* I, 618.

|| *Ibid.* I, 620.

¶ *Ibid.* II, 10.

to be fatal. "Either peace or war," he wrote, "will relieve my distresses ; peace as it will enable me to approach my supplies ; war as it will give me an opportunity of attacking Ahmednagar, in which place I shall find plenty. There is another state for which I must provide, viz. that of a continuance of these negotiations : this I can do only by your [Stevenson's] assistance." *

Fortunately the enemy was also suffering from these conditions of scarcity. Holkar, "in the greatest distress for want of provisions," was obliged to recross the Tapti, while in Seindia's camp "the very greatest distress for everything" furnished "the strongest motive for war." † The whole of this critical situation is discussed in a letter to Colonel Close ‡ : its length and detail make it unsuitable for quotation. But the moral was not lost on the commander : "The difficulties . . . in which this corps is likely to be involved will be a useful lesson to governments and to us all : first to avoid entering into a treaty with a prince the only principle of whose character that is known is insincerity ; and next, to avoid, if possible, to enter upon a campaign at a distance of seven hundred miles from our own resources ; not only not having the government of the country on our side, but in the shape of a friend, our worst enemy." How well the lesson was learnt was brilliantly proved during the campaigns of the Peninsular War.

Gradually the difficulties of the moment were overcome, and by the end of July much improvement was reported. The long line of communication with the south was unbroken and by this route General Stuart was able to send supplies and animals ; § the weather, which from time to time delayed or inconvenienced the Army, had not done so much damage as Wellesley feared. The march to Ahmednagar was begun and on the 12th of August the fort was taken. Its capture secured the road to Poona and was "an important point of support to operations to the northward," || but did not entirely relieve Wellesley's anxiety. It was still desirable to maintain the line of supply with Bombay, and Wellesley was obliged to make a protest when Duncan's plan to deal with a petty chieftain whose lands controlled the road involved a risk of a break of communication with the coast. ¶ Nor were his own prospects

* See Despatches, II, 32. Stevenson was drawing his own supplies of rice from Hyderabad.

† *Ibid.* II, 29.

‡ *Ibid.* II, 33-37. Cf. the letter to General Stuart which follows (pp. 37-41).

§ *Ibid.* II, 191.

|| *Ibid.* II, 195. Cf. 313.

¶ See Supplementary Despatches, IV, 149.

at Ahmednagar very bright. Twelve days after its capture he declared, "I tremble for the want of common country grains for the followers and cattle. The country is completely exhausted, the villages depopulated, and large tracts of excellent land uncultivated. . . . We have lost such numbers of cattle by the length of our march and starvation, that we have none to carry grain to our followers ; and I learn that we have lost vast numbers of those coming from General Stuart's army ; I believe nearly one-half the whole number." * Even so the commander was "well supplied and equipped with everything."

An interesting campaign now followed. Wellesley had relied on a full river in the Godavari to keep the Maratha horsemen out of Hyderabad, but while Stevenson had moved away to the east the enemy slipped by and threatened to cross the river. Wellesley determined to follow if the enemy carried out their threat, but as he did not believe the river would be fordable he did not anticipate this march. But if the enemy did advance, thereby escaping from their own exhausted country, they would threaten the British communications and supplies and, if successful, compel the commander to recross the river to subsist.† On the 2nd of September Wellesley was on the river and decided to remain near by because the enemy still threatened to cross and the river was fordable, "which was never known before at this season of the year." The Marathas hesitated lest they should be cut off by a rise in the river, "of which," said Wellesley, "there was no doubt."‡ He repeated this belief on the 15th of September because there had been "some appearance of a recommencement of the rain," § and he used this fact to cover a convoy of money and grain from Hyderabad. But a week later the order was modified and he confessed "the river Godavari still continues to fall, and I am afraid that it will not fill again this season." ||

The fact was that the English commander had to deal with a weak monsoon, and his emphatic belief that the river would rise was due to ignorance. About the same time he was complaining that even the fertile lands of Hyderabad were not supplying him

* See Despatches, II, 235.

† *Ibid.* II, 257.

‡ *Ibid.* II, 264. Elphinstone writing to his friend Strachey on the 3rd of September said: "The river, I am sorry to say, is fordable in several places, which is unusual. If the rains . . . have extended north this river will rise, for which I am ready to pay £100 down" (Colebrooke, "Life of Mountstuart Elphinstone," I, 55).

§ *Ibid.* II, 302.

|| *Ibid.* II, 322.

as liberally as they could, and although he hints at dishonesty it is very probable that lack of rain had affected that area and reduced it to the verge of famine.* Certainly within a month Wellesley admitted that "the rain . . . has in this year entirely failed; the consequence will be a great scarcity of grain, and there is every reason to apprehend a famine. . . ."†

It was not the river but the Army that changed the enemy's threat to invade Hyderabad into a retreat to the northward. Wellesley followed, and making contact with Stevenson, arranged to attack. Unfortunately, it was necessary for the Armies to separate again, "first because both corps could not pass through the same defiles in one day; secondly because it was to be apprehended that if we left open one of the roads through these hills the enemy might have passed southward."‡ Thus, although never more than twelve miles apart, the two British forces did not unite in time and Wellesley alone faced and defeated the Marathas at Assaye.

After the battle complaints of the lack of supplies appear again in the despatches. On the 3rd of October Wellesley wrote: "I have been lately well supplied although in this desert and exhausted country."§ Two days later he had determined to withdraw to the southward rather than risk the security of his communications with General Stuart, while his dependence on Bombay was still of great significance. Stoppage of supplies from that quarter was "very unpleasant," and if the war continued the prospects of the British "were not very favourable"; those of the enemy were "even worse than ours."||

Wellesley was rather unreasonable with Duncan, for if the Governor had failed to send up supplies it was because the provisions had been used to feed the populace of Bombay and the neighbouring district. The British general was experiencing one of those periods of famine or scarcity which occur in this region about once every five years. A visitor to Poona in 1809 records another disaster in 1805-1806, when it was said that eighty thousand

* Cf. Valentia, *op. cit.*, II, 126. The Nizam's territory was then (October, 1804) as much devastated by famine as the Poona district. Valentia's significant comment is, "This must be owing to want of rain, for Holkar and Scindia caused no devastations in that country."

† See Despatches, II, 414.

‡ *Ibid.* II, 338. Fortescue (*op. cit.*, V, 22) suggests that the division of the Army was really due to the fact that Wellesley knew that Scindia was afraid of him, and, consequently, he was prepared to take a grave risk.

§ *Ibid.* II, 369.

|| *Ibid.* II, 399-400.

persons died in Poona.* In such a country, where even in the most favourable seasons the Indian peasant is never overfed, it is hardly remarkable that supplies from Bombay should fail to reach a British Army more than a hundred miles distant. The situation was one of such gravity that Wellesley addressed long letters to the Resident at Mysore and other important administrators in the south of India with a view to improving the organization of the rice resources of those regions.†

While Wellesley was marching between Assaye and Aurangabad to prevent any hostile move to the southward,‡ Stevenson had been moving steadily eastward along the Tapti valley. It was in this lowland that the two Armies reunited and defeated the Marathas "on the plains of Argaon immediately in front of that village" on the 29th of November, 1803. Shortly afterwards the fall of Gawilgarh marked the end of the fighting. But the difficulties of the commander were in no way lessened. Disorder in the Nizam's dominions was so widespread as to imperil the supplies of the Army in the north,§ while scarcity of forage increased the difficulties of withdrawal.|| With the approach of the summer of 1804 and the prospect of a war with Holkar, matters became most serious. At the beginning of June Wellesley reported: "Famine rages in the Deccan. But some rain has fallen, and I propose to march and endeavour to get to the northward. We lose fifty persons every day at Ahmednagar, where we feed the number of five thousand. What must it be where the people are not fed?"¶ Elsewhere conditions were as bad, and it was soon obvious that military operations were impracticable "as a measure of prudence if not of necessity."** Hallyburton, who was north of the Godavari, was obliged to draw nearer to Berar in order to subsist, while Wellesley, camped near Poona, was never able to carry out his projected march to the northward.†† Hence operations against Holkar came to an abrupt end in the middle of June, and Wellesley broke up the Army and returned to southern India.

The significance of the facts is not that Wellesley had been

* See M. Graham, "Journal of a residence in India, 1809," p. 69. For frequency of famine or scarcity in the Bombay Deccan, cf. "Report of the Indian Irrigation Commission 1901-3," Part I, p. 4.

† See Despatches, II, 404-6; cf. letters to the Collector of Canara (p. 406), Secretary of Government, Bombay (407), and Malcolm (513).

‡ See Supplementary Despatches, IV, 199.

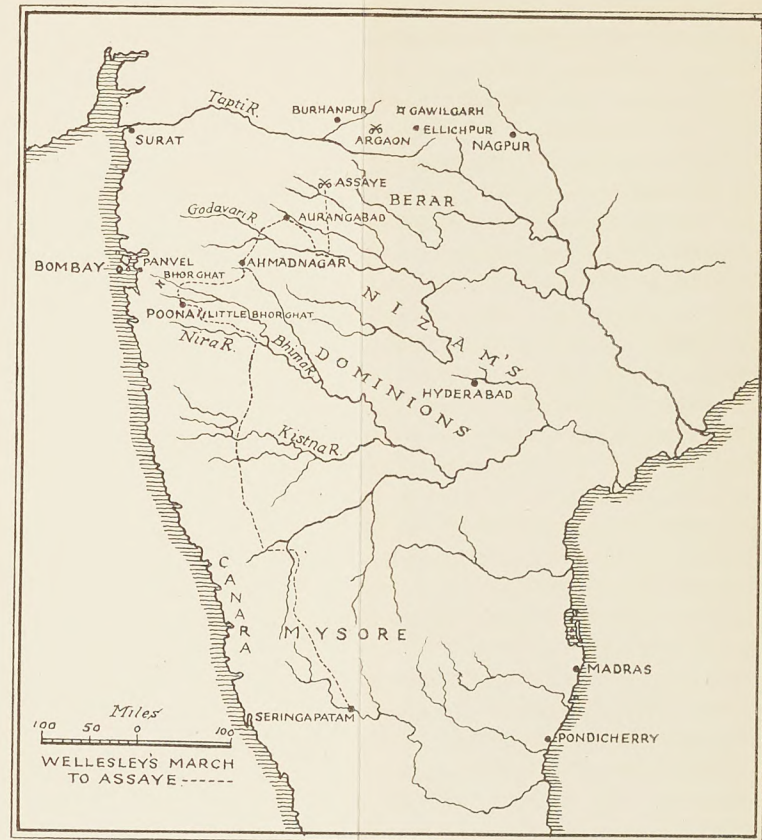
§ See Despatches, II, 653.

|| See Supplementary Despatches, IV, 331.

¶ See Despatches, III, 329.

** Ibid. III, 334.

†† Ibid. III, 332, 342-4.



[To face p. 52.]

SOME GEOGRAPHICAL FACTORS IN THE CAMPAIGNS OF ASSAYE AND ARGAEON.

The spelling of place-names in the text has been modernized to agree with the War Office map of Asia on the scale of $1/4$ M, on which the above sketch-map is based.

defeated by the elements, but that he had carried on the campaign for so long. He began by making allowance for all the natural factors, but the rivers failed to rise, the rainless summer destroyed the forage, and the Army could not move. In a country where he could get so little assistance he conducted a brilliant campaign and won two striking victories. His own personality, the qualities of his troops, and the mistakes of the enemy do not completely explain his success. From beginning to end he paid careful attention to the geographical factors ; they affected his plans, his marches and his battles. For a time he successfully overcame the difficulties, but in the end, when he was given the impossible task of cooperating with Armies fighting far from the Deccan, he recognized the limit of his own power. Monson,* without his prudence, neglected the geographical factors and met with disaster ; Wellesley preferred to break up his Army and to admit failure rather than to wait until its destruction had been completed by famine.

* Wellesley's criticisms of Monson in Despatches, III, 456-463, are most illuminating. But, as Mr. Fortescue points out, Monson was not entirely his own master.

MECHANIZATION AND THE ROYAL ENGINEERS

MECHANIZATION is a much overworked word these days, and whilst it has been publicly defined on at least one occasion, it is generally accepted as denoting increased mobility. Such a meaning, however, merely covers the line along which the internal combustion engine has been mainly developed to date in the Army.

This article is an attempt to show that this one line of development, whilst giving increased efficiency of movement to the Army as a whole, has nevertheless presented to the Royal Engineers many new problems and increased responsibilities. It is further desired to show that the solution of these particular problems by the Royal Engineers is likely to be found in the exploitation of the internal combustion engine along another line.

The conception which it is first of all desired to establish is really this. Within the last thirty years a new prime mover has come into the military ken and has been recognized to possess characteristics which make it peculiarly adaptable for use in several directions in the prosecution of war. Up to date we have really known only four sources of power in war. First came man and the beasts of burden, all of whose capacity was strictly limited, although highly adaptable to all conditions within the limitations. Then came explosive, which, in spite of its unlimited capacity for doing work, proved limited in adaptability. Then steam appeared, unlimited in power, easily adaptable, but suffering from the handicap of bulk and mass. Now there has been evolved the internal combustion engine, practically unlimited in power, flexible and compact. These few adjectives hardly do it justice, nor do they fully explain how the natural physical compactness of this engine combines with its high "spiritual" power to make it adaptable for work which explosive could never be sufficiently tamed to undertake, and which will permit it to operate far forward in the battle zone to an extent which that bulky old asthmatic, steam, has never been able to adapt itself in a life of over one hundred years.

The characteristics of the internal combustion engine which single it out for military utilization are mainly high power for low bulk and mass, together with reliability, flexibility and ease of control. Perhaps the day after to-morrow we shall have learnt to utilize radium and so attain a still higher power for bulk ratio, when we shall witness a revolution in the technique of all three Services and the internal combustion engine will be relegated to a new wing of South Kensington Museum.

Let us, then, first of all examine the new problems which confront the Royal Engineers as a result of the utilization of the internal combustion engine to increase the mobility of the Army in general. In the days when the horse was the "tractor" there were, as there still are, three limitations, namely, speed, load and the road. (These terms are used very broadly; for example, the last is intended to cover all restrictions imposed by terrain.)

It is not contended that the advent of the internal combustion engine has cancelled these limitations; they have merely been moved back—the horizon has receded.

Considering first the speed factor, we see that an increase in the speed of the individual vehicle means an increased rate of movement as well as an increase in the range of an army. The tendency will be for a general speeding up of operations, and a consequent reduction in the time available in which to carry out any engineer work which may be required. This facility of movement will doubtless tend to a more frequent change of station or position, with an attendant multiplication and repetition of engineer services at different locations. Generally speaking, this factor means that the sapper will have less time in which to do a given amount of work.

The Load Factor.—The sudden access of power opens up almost limitless possibilities as regards the amount that may be carried off the man. In a comparatively recent lecture* Sir Percy Hambro described how it has been possible, using mechanized first-line transport, to reduce the load on the infantryman by from six to ten pounds. Things which it has been considered essential to carry on the man, in order to ensure that they were available when required, can now be carried on the vehicle, as a result of the greater power and speed available within the new vehicle, whilst in the tank we have seen a new weapon brought into being, carrying a load of armour and armament which has hitherto been impossible.

This increase in the mobile load of an army reacts very directly

* R.U.S.I. Lecture, 20th of October, 1926, "The Horse and the Machine in War."

on the responsibilities of the Royal Engineers. Increased vehicle loads require stronger bridges, which in turn entail heavier material, and whereas previously "heavy" bridges were usually required only to consolidate behind an advancing army, there is to-day every reason to expect that the reconnaissance and assault bridge will require to be of the "heavy" type. A further reaction arises in respect to artificial obstacles. Wire, the best known and most widely used obstacle of the last war, is useless against tanks, and in fact it is not likely to present much difficulty to any mechanized vehicle. It is, therefore, necessary to devise either a more solid or a more offensive form of obstacle, that is, steel stockades and moats or explosives and chemicals. Mention has been made only of some of the more obvious effects of the load factor, but it is sufficiently clear that they all entail an increased volume of engineer work.

The Road Factor.—The ability of the tracked or six-wheeled vehicle to operate across country has considerably reduced the limitation of the road, and in future the capacity, direction and condition of a road will no longer, of necessity, limit or restrict an army's movement. This characteristic of the new vehicle has opened up the era of "roadless tactics"* and has enabled the vehicle to utilize the expedient of dispersion to an extent hitherto only enjoyed by man and beast. It is true that the better the road surface, the greater the speed attainable; nevertheless, the tendency will probably be for the road to become a kind of speedway for especially urgent traffic. This ability to disperse is clearly of great use where "road space" is an important factor, whilst as a counter to air attack, it is likely to prove a more economical and radical form of defence than the multiplication of anti-aircraft guns.†

Dispersion, therefore, is likely to decrease both road maintenance and also the necessity for the construction of new roads, but it also brings in its train many additional responsibilities.

First of all dispersion will call for a multiplication of crossings over the same river, or swamp, or through the same wood, whatever form the obstacle may take. If such is not the case, then much of the defensive advantage as regards hostile aircraft and time saving as regards road congestion will be lost. An increase in the number of obstacle crossings will involve, in the event of a withdrawal, an increase in the number of demolitions. And here it is convenient to interject that our ideas on demolitions have been severely revolutionized in the light of war experience. Quite apart from any increase in the

* See "Reformation of War," p. 165, by Colonel J. F. C. Fuller, C.B.E., D.S.O.

† See the *Times*, 22nd of August, 1927.

number of demolitions consequent on the *wanderlust* of the mechanized vehicle, it is essential that the individual demolition should in future be much more radical. It is no longer sufficient to cut the span ; it is essential to destroy both the span and the abutments. The competition between extensive demolition and the easily erected stock spans should be just as hardly waged as will be the competition between armour and the missile. Finally, dispersion will necessitate increased communications, and although R/T and W/T may in time become secret, the day of the buried cable, forming a basic network of communication, is not yet past and cable burying, therefore, on a large scale is still likely to be required.

Two other factors which affect the Royal Engineers may be mentioned as being inherent to a mechanized army.

Fuel Supply.—A problem which remains to be satisfactorily solved is the fuel supply of a mechanized army. To-day the fuel is petrol, and it is conceivable that suitably protected storage tanks will be required to be constructed. However, petrol may not always be the fuel, and should it ever be replaced by heavy oil, which would lend itself to a piped supply to certain refuelling points, the laying and maintenance of these pipelines would doubtless be undertaken by the Royal Engineers.

Water Supply.—On the other hand, the elimination of the horse and the mule will result in decreased requirements in watering facilities.

Perhaps the foregoing will appear more clearly if a balance-sheet be interposed here. Its debit side summarizes the probable sources of increase, whilst the credit side shows the reduction in the responsibility of the Royal Engineers.

<i>Debit.</i>	<i>Credit.</i>
Speed. 1. Increased rate of movement and range.	
Load. 2. Increased first-line loads. 3. Increase in mass and extent of obstacles.	
Dispersion. 4. Multiplication of crossings over natural obstacles. 5. Increase in magnitude of demolitions. 6. Increased signal communications, i.e. wire and wireless.	Dispersion. 1. Saving in road construction and maintenance.
Inherent. 7. Possible responsibilities for fuel supply.	Inherent. 2. Saving in water supply.

Before making any deductions from the foregoing, attention must be drawn to the presence of two items on what has been called the credit side of the balance-sheet. It may be considered something of a flight of fancy, but it should not be overlooked, that, as a result of endowing the mechanized vehicle with certain additional properties or capabilities, it will be possible materially to reduce many of the responsibilities which at present rest on the Royal Engineers. Just as the endowment of the vehicle with a track or multiple wheels has made it largely independent of roads, so it will be possible to make it independent of bridges by designing either an amphibious vehicle or one which carries its own bridge. Again, since the load which any vehicle carries is to-day of less concern than when the vehicle was horse-drawn, it may be that we shall one day see the vehicle not merely the transporter of men and weapons, but also their shelter from the weather, so reducing the amount of hutting required. Clearly the incorporation of such features in the design of future vehicles is much to be favoured for its effect on engineer economics. Since, however, the deciding factors in the design of the vehicle are Army economics and requirements, the amphibious or other properties will doubtless be delayed until such time as the ability for independent roaming, or dispersion required of the vehicle has reached such proportions as to make it impossible for it to be any longer dependent on the traditional ubiquity of the Royal Engineers in the matter of crossings and shelter. This is only another way of saying that the design of the vehicle should recognize the new problems which it presents to the other arms and strike the best balance to attain cooperative economy of force.

But to return to our balance-sheet, the main deduction to be made from this is that the new increased mobility will involve the Royal Engineers not only in more work, but will also allow them less time in which to complete it. Not only the amount but the rate at which it must be executed is increased. Work is measured in man-hours, based on the estimated capacity of a man to carry out varying types of work. Since the time which can be allowed for the execution of a job is invariably defined by the commander, the number of men required to complete the job in the given time becomes simple arithmetic. Jobs which hitherto could be allowed fifty hours will possibly now require to be completed in ten hours.

Up to the present time the answer to this problem has been found in an increase in the number of men. Where the labour has not been available, the job has often been ruled out as being beyond the capacity of the engineer troops available. The increased rate

of working to be required of the engineer troops in the future is likely to place an increasing number of jobs outside their capacity. Large working parties will no longer be available in an army which tends to become composed largely of automobile machine gunners. Consequently, except by an increase in engineer *personnel*, disproportionate to the rest of the force, there is a grave danger of a bottle-neck, which will slow down the average rate of operations, being found to exist within the ranks of the Royal Engineers.

Royal Engineer Methods in Recent Years.—Before the possible methods are examined by which advantage may be taken of the power offered by the internal combustion engine to deal with this problem, it may be of interest briefly to trace the lines along which, since 1914, Royal Engineer organization has sought to compete with the ever-increasing calls made upon its resources.

In 1914 the whole conception of Royal Engineer employment was very largely based on improvisation. The field companies carried manual tools in their first-line transport, but (ignoring for the moment the plank of tongued and grooved boarding carried in the G.S. wagon and the sandbags in the tool carts) the only expendable stores or materials worthy of mention, which increased the output per man, were the explosives.

Taking into account the number of troops and vehicles, the axle loads of first-line transport and anticipated shell-power, etc., it was generally anticipated that material would be found locally in quantity and of quality to enable a satisfactory job to be performed. It should also be borne in mind that whilst the infantry of those days had received training in field works, there was no clear responsibility laid upon it for its own field defences.

The Germans having lost the initiative, both they and the Allies went to ground and embarked on the most extensive fixed fortifications the world has ever known. Increased fire-power begat trenches, mining, mined dug-outs, and concrete pill-boxes. Shell fire, in a country already precariously drained, completely destroyed the drainage system, necessitating revetment, tracks, and wooden roads, whilst for an appreciable time wire proved triumphant as an obstacle, and high concentration of troops made the resources of the country, as regards water supply, totally inadequate. These factors are sufficient to indicate the tremendously increased calls made upon the Royal Engineers in the field area.

The answer to all this took several forms. The first thing done was to increase the man-power available for engineer work, not only by skilled tradesmen but also by pioneer battalions; but, in spite

of this, the amount of work remaining to be done was beyond the means available. Improvisation from local supplies gradually took a back seat, mainly because all the local resources of material had been utilized. Stores of all kinds were poured into France and Belgium, whilst factories in the line of communications area manufactured stores designed to economize labour in the field area. The next effort to cope with the situation took the form of an improvement in the engineer organization. The less skilled work * was re-established as the definite responsibility of the combatant arms directly concerned, and on such matters the Royal Engineer responsibility was limited to advice. It became thereby possible to delegate all the routine maintenance of trenches and wire to the units holding the particular trenches, and engineer *personnel* became available for the more skilled work of concrete dug-outs, revetting, tracks and water supply. But when the war closed, it cannot be said that the available engineer resources, in spite of the increased numbers and improved organization, came anywhere near coping with the volume of work awaiting completion, and the only solution appeared to be a still further increase in the *personnel*, both skilled and unskilled, available for engineer work.

From this brief review of engineer work in the War, it can be seen that recourse was had to the increase in numbers of men, to the delegation of responsibility, and to the manufacture of standardized stores and equipment to solve the problem of how to cope with the work. It is noteworthy that of all these, only the last did anything to increase the output of the individual sapper in the field area, whilst throughout the war practically nothing was done to improve the tools with which he exercised his skill.

Just as the competition between mobile armour and the missile in the Middle Ages resulted in the defeat of the former on the introduction of gunpowder, as a result of the horse, which was the prime mover, being forced to the limit of its carrying capacity, so in a very similar manner the competition exists between the amount of engineer work required to be done and the limited capacity of the man to execute it, and man has long since reached the limit of his power. The result has been that more and more works have been denied to the commander. He would like this done—it would materially assist his plan of attack. How often has the answer been, "It can't be done in the time"!

The Peculiar Assistance Mechanization offers the Royal Engineers.
—It has been shown that the essence of so-called mechanization is

* See "Engineers and the Army," *Army Quarterly*, October, 1926.

power, at present in the form of the internal combustion engine. It is common knowledge that all arms are utilizing that power to attain increased mobility. It remains to discuss the further utilization of power by the Royal Engineers to solve their problem, "How is more work to be done in less time?" How is the output of a given number of sappers to be increased? We have seen the efforts which have been made to cope with the problem in the past, and which have mainly centred around an increase in the numbers of men employed, either directly or indirectly.

Now the solution of the problem by the indefinite increase of numbers, both skilled and unskilled, is uneconomic, when regarded from the point of view of the Army as a whole. In practice, of course, there is another limitation, since the number of men who can be employed on a job at one and the same time is more often than not distinctly limited, owing to the space available in which to work. Similarly, the delegation of responsibility is of no value from this, the only point of view, if it simply means that work which was originally engineer work is to become the responsibility of the *personnel* of some other arm. When the infantry wanted increased fire power, the strength of the battalion was not doubled, the number of machine guns was increased, and so to-day when it is desired to increase the output of the individual sapper, it is contended that the way to achieve it is by the utilization of the power offered by the internal combustion engine. This prime mover is not particularly new. It is being improved year by year as regards reliability, simplicity, compactness or, in other words, as regards the power developed per pound of weight and per cubic inch of space occupied.

We have also had cognizance for some years of several methods of transmitting power, electrically, pneumatically and hydraulically.

But so long as we laboured under the power limitation of the horse, and until by means of tracks or some other device we were able to evolve a vehicle or platform which could move over country with ease and expedition at least equal to that of the horse, so long did we suffer from severe limitation as to the areas of the battlefield in which we could utilize the practically unlimited power generated by the internal combustion engine to increase the output of the man. It is, therefore, clear that "mechanization" should mean very much more to the Royal Engineers than it does to any other arm.

To-day we have a self-propelled platform which is capable of carrying a power-producing unit to any part of the field area. This has never been practicable to such a [degree before, and,

consequently, having a well-trying prime mover made mobile, having well-tested means of power transmission, there would seem no reason why we should not make use of some of the many power-operated tools which are on the market, to speed up our work, to increase the output of the individual sapper.

The tools of field engineer units remain practically the same to-day, save for an improvement in the quality of the steel, as they were in the South African War, whilst it should be noted that the demands of civilian practice from such prime movers and mechanical tools as are available to-day are hardly less severe as regards reliability, simplicity and handiness than would be demanded by service in the field.

It is not proposed to make any specific recommendation as to the type or power of the mobile prime mover, nor as to the means of transmission of the power, whether pneumatic, hydraulic, electrical or direct, which should be employed. It is not possible to say that any particular tool or plant should be part and parcel of the equipment of a field unit; it may be sufficient to have the tool or plant available with the Field Park Company, since the speed of the mechanized vehicle allows it to be held in readiness ten miles or more in rear and still be within one hour's call. These are all matters for practical experiment; the main consideration is that the tools should be immediately available when required, and that the men who are to operate them in war should learn their use in peace.

It may make the train of thought clearer if one or two examples are given of the suggested applications of modern power-driven mechanical tools.

Demolitions.—Consider the advantages in preparing masonry or concrete bridges for demolition when a pneumatic drill is available with which to attack the piers, abutments and roadway, and open up charge chambers. The saving in time and explosive, the increased efficiency and extent of demolition is enormous. For land mining a mechanically driven earth auger or pneumatic shovel is the difference in many cases between accomplishing the job and leaving it undone as being beyond our powers.

Obstacles.—Consider the question of blocking the roads debouching from the exposed flank on to the main route of an advancing division so as to hold up armoured cars. Such a job is more than a field company could tackle in the time at present, and the usual solution in tactical schemes is the ubiquitous farm cart. It is suggested, however, that the tree is even more common than the farm cart, and if some form of mechanical tree feller is utilized, the

field company can deal with such a problem effectively with ease and certainty. It is noteworthy that there exists a power-driven saw which will cut off a tree twenty-six inches in diameter, close to the ground, in forty seconds, or about one-twentieth the time required by hand, whilst a pneumatically operated cross-cut saw has just been placed on the market.

Tank Obstacle.—An experiment was recently made digging pit props into the ground. The work involved in preparing three hundred yards of such an obstacle, with some doubt as to its effectiveness at the end, was six hundred man hours, which, with the present equipment available, put the extensive application of the idea quite beyond the powers of the available sappers. But if the pneumatic pick and shovel were available with which to excavate the holes, and if steel posts were available which could be concreted into the holes with quick-setting cement mixed in a concrete mixer, a formidable obstacle would be attainable in less time than it takes to erect the ineffective one.

Again, were we able, within a reasonable time, to cut a path through a wood, one of nature's most effective obstacles to tanks would immediately be shorn of much of its value.

Other mechanical aids, such as the power shovel, the trench digger for pipe and cable lines, the power winch, the riveter, to mention only a few, will all bear consideration for some place in the equipment of the Royal Engineers of the future, if economy of force is to be attained, and if the Royal Engineers are to fill their place in the mechanized Army of the future.

Possibly the nearest approach in civil life to the type of vehicle or vehicles visualized is the fire-engine. It transports the men, the tools and the power. Truly the plant required by the field company is not likely to be quite so simply achieved, but it is submitted that the full potentialities of the internal combustion engine will be missed if they are merely utilized to replace the tool-cart team of horses. The field company requires mobility at least equal to that of any other unit, but the universal application of the power of the internal combustion engine is what has been wanted for many years now to increase the output of the individual sapper.

In conclusion, it is necessary to draw attention to the fact that this proposal suffers from a very serious handicap. Broadly speaking, the employment of Royal Engineer *personnel* in war may be classified under two heads :

1. There are certain war contingencies which it is possible to gauge sufficiently accurately in peace, or in any event, before they

actually arise, to meet which certain apparatus or equipment can be designed and manufactured. Such equipment can best be instanced by the stock span bridge. In the handling of such equipment the *personnel* are employed as "erectors" of standardized and pre-manufactured equipment. On such work they are not necessarily employed at the trades for which they are trained, although the erection calls for general technical engineer knowledge.

2. The other form of employment requires, as does all engineer work, tools, material, and technical skill, but in this case the nature of the contingency or of the job cannot be sufficiently accurately gauged before the event to make the pre-manufacture of apparatus a proposition. On such jobs the *personnel* are likely to find considerably more employment at their own particular trades, utilizing and working on material in the raw state to effect the job in hand.

The main differences between these two forms of employment are these :

In the first type, the apparatus or equipment is not necessarily expended. It can be dismantled and re-erected elsewhere, with little loss of efficiency as a structure, and with only the expenditure of the necessary labour. The rate of erection of such equipment is limited by the physical powers of the individual sapper, and erection can only be hastened by translating the necessary evolutions into a drill. This class of employment, as has been said, covers mainly the stock bridge and offers little opportunity for the utilization of power.

In the second type of employment, which covers obstacles, demolitions, concrete construction, earthworks, etc., material is definitely expended, and its value is lost. There can be no re-utilization of the material ; it either serves the purpose for which it was fashioned, or else it has been wasted. The rate of output to date on this type of work has also been limited by the powers of the man, but it offers the field *par excellence* for the power-driven tool. The latter class of employment forms by far the greater part of the employment of the Royal Engineers in war, yet, owing to the expense involved, it is this form of employment which is, and can be, least practised in peace time. During their collective training season the Royal Engineers can cooperate with the other arms as "erectors" only, little damage is caused, expense is small, and the result is patent to all. But, on account of their expense, we shall probably never see extensive obstacles or demolitions on manœuvres.

The deduction from all this is that there may be a temptation to spend a disproportionate amount of training, time and money

for experiment on the use and evolution of non-expendable equipment to the detriment of the development of a unit transmitting power to all manner of tools, and capable also of effecting a true conservation of physical engineer force in war. The pontoon bridge is showy, it is a real operation of war, it helps towards realism, and it can cooperate in peace time training. Unfortunately, we can only afford to allow the pneumatic drill to cooperate in war. This fact should not, however, be allowed to unduly handicap the development in time of peace of power-operated tools suitable to engineer requirements in war.

"THE OTHER SIDE OF THE HILL"

No. VII *

THE GERMAN ATTACK AT VIMY RIDGE, MAY 1916

(*With Map*)

THE British relief of the French Tenth Army in the line south of Loos, undertaken as a result of the German pressure at Verdun, was completed early in March 1916. Thus we took over the positions on Vimy Ridge so hardly won by the French troops during the Battles of Artois of the previous year, when the Germans were driven from the heights of Notre Dame de Lorette, and across the Souchez river to the ridge beyond.

Subsequent reorganization of the line allotted to our 47th (London) Division—IV Corps, First Army—the Berthonval and Carency sectors. On its immediate right was the 25th Division—XVII Corps, Third Army. Here, on either side of the junction of the two Armies, our trenches ran along the western slope of the highest part of Vimy Ridge. Thence they traversed the northern slopes, running down towards the Souchez river between the villages of Souchez and Givenchy-en-Gohelle.

Neither British nor German had command of the crest, and neither viewed his front defences with any satisfaction. Immediately to the south of the Berthonval sector it had been our intention to hold the front line as the main line of resistance, in order to keep the Germans as far as possible from the Talus des Zouaves, a narrow ravine running up from the Souchez valley about 800 yards behind the front trenches. Along this ravine the Germans were in the habit of placing heavy and accurate barrages, which threatened to isolate the forward positions of both our 25th and 47th Divisions. But the enemy had obtained such a good start in their mining operations that it was extremely dangerous to hold this front line

* Previous articles in this series appeared in the *Army Quarterly*, January, 1924; April, 1924; July, 1924; January, 1925; October, 1925; October, 1926; and January, 1927.

in strength. Consequently it had to be held by posts, and all efforts were concentrated upon the consolidation of the support system. Our 25th Division had come to regard this sector as a most difficult one: constant bombardment and mine warfare had made the front area a maze of shell holes and craters, whilst a ceaseless struggle had to be waged both above and below ground.

The right portion of the Berthonval sector was also in a bad state. There was little wire out, and the communication trenches were under observation of the Germans holding advanced posts in mine craters. Between the front line and the support trenches were small isolated posts, and the German artillery fire made movement by day almost impossible.

Generally, as regards observation, the Germans were at a decided disadvantage. From the eastern side of the Lorette spur—beyond the river and some 1,500 yards north-west of Souchez village—extensive views could be obtained of the ground behind the German line.

On the German side it is interesting to find that their attack had its origin in the fear that our mining operations would make their forward positions untenable. It was therefore considered necessary to advance and get possession of our mine shafts.* The 86th Reserve Regiment assumed that a large portion of its trenches was undermined. "We could not fight the enemy with the same weapons, as he was superior to us in both men and material." The only possible counter-measure was, therefore, an advance which would take possession of the entrances to our mine galleries "and thereby obtain a respite from underground warfare."† The 4th Guard Division (Guard Reserve Corps), which relieved the 1st Bavarian Division on the front opposite our 25th Division early in May, found that mine warfare was on the increase. The pioneer companies had to be augmented by *Bergmannszüge* (Mining Sections) formed by men of other units, and Bavarian pioneers who were familiar with the sector remained behind to assist the newcomers.‡

North of the 4th Guard Division the German IX Reserve Corps had the 17th Reserve Division in the line. From a point approximately opposite Central Avenue, the junction of our 25th and 47th Divisions, the troops holding the front consisted of the 9th Reserve Jäger Battalion, the 86th Reserve Regiment, and the 163rd

* "History of the 163rd (Schleswig-Holstein) Regiment."

† "History of the 86th Reserve Regiment."

‡ "History of the 4th Guard Division."

(Schleswig-Holstein) Regiment, the last-named formation overlapping the right front of our Carency sector.

The German attack was under the direction of Lieutenant-General Frieherr von Freytag-Loringhoven.* In it the 163rd Regiment was to be the predominant partner, and the operation was officially named "Schleswig-Holstein." Preliminary orders were issued as early as the 9th of May for "the middle of May," but the attack was eventually postponed till 9.45 p.m. (7.45 p.m. British time) † on the 21st.

The assault was to be delivered from an eight-company frontage which embraced our Berthonval sector, the right battalion front of the Carency sector to the north, and the left of the 25th Division to the south. This portion of our line was held as follows :

Left of 25th Division :	10th Bn. Cheshire Regt. (7th Brigade).	
Berthonval sector)	{ 1/7th London (City of London) }	{ (140th Brigade)
(Central Avenue to Ersatz Alley))	{ 1/8th London (Post Office Rifles)	
Carency sector :	1/20th London (Blackheath and Woolwich)	of 141st Brigade.

Our 47th Division had barely taken over the Berthonval sector from the 25th Division, the 140th Brigade completing the relief in the trenches on the night of the 19th/20th of May, whilst the artillery relief was fixed for the night before, and the actual night of, the attack.

The German organization for the assault is available in detail. ‡

Northern sector : Lieut.-Colonel Sick.

Nos. 5 and 8 Coys. 163rd Regt. to assault.

268th Pioneer Coy.

5 machine guns, 71st Machine-Gun (Schützen) Section.

7 machine guns, 163rd Machine-Gun Coy.

One company 163rd Regt. in local reserve.

Nos. 6 and 7 Coys. 163rd Regt. } Regimental reserve in and near
with 2 machine guns. } Givenchy.

Nos. 9 and 10 Coys. 163rd Regt. at La Coulotte.

Nos. 11 and 12 Coys. 163rd Regt. at Sallaumines.

The troops at La Coulotte—near the main Arras—Lens road, more than two miles north-east of Givenchy—and at Sallaumines—a further two miles away in the same direction—were designated "brigade reserve."

* The well-known military writer. He was deputizing for the commander of the 17th Reserve Division, Major-General von Zieton, who was away on leave.

† Hereafter only British times are mentioned.

‡ Histories of the 163rd Regiment, the 86th Reserve Regiment, and the 9th Reserve Jäger Battalion, from which this account is mainly compiled.

Centre sector : Colonel von Wurmb.

On right—Nos. 1, 3 and 2 Coys. 86th Reserve Regt. followed by
Nos. 6, 5 and 4 Coys. to carry material.

Half No. 1 Coy. 9th Reserve Pioneers.

No. 1 Coy. 12th Bavarian Pioneers.

On left—Nos. 4 and 1 Coys. 9th Reserve Jäger Battalion.

Nos. 13 and 15 Coys. 86th Reserve Regt.

No. 10 Coy. Bavarian Reserve Pioneers.

293rd Mining Coy.

No. 2 Coy. 9th Reserve Jäger Battalion.

No. 3 Coy. 9th Reserve Jäger Battalion and machine-gun
reserve.

No. 14 Coy. 86th Reserve Regt. in brigade reserve.

The Jägers had been reinforced by the arrival of a cavalry
machine-gun section armed with captured Russian weapons.

The left-centre assault column occupied a depth of nearly 1,100
yards.

Left sector : Nos. 5 and 8 Coys. 5th Foot Guard Regiment.

The night of the 20th/21st of May was utilized to get the assault-
ing troops into positions of assembly, and all were ready by daybreak
of the 21st.

THE ATTACK

No signs of the projected German attack appear to have been
noticed by our troops before 3.40 p.m. on the 21st of May, when an
artillery barrage was put down on the whole front of assault. Our
communication trenches leading up to the Talus des Zouaves were
also shelled, and forward communications were cut. German
artillery fire was heavy on back areas and battery positions, the latter
being deluged with gas shell. This was used, too, on our front
defences ; and a change of wind blew the gas back over the German
troops waiting to assault, but little harm was suffered thereby.

All the guns of the IX Reserve Corps were employed in the
operation, supplemented by the artillery of the IV Corps and Guard
Reserve Corps, six heavy howitzer batteries, and nine mortar
batteries—80 batteries in all. Six heavy, nine medium, and eight
light *Minenwerfer* were also in action. The counter-battery work,
with air observation, proved most effective and no less than 83
British batteries were located. The ammunition allotment per
battery for the preliminary bombardment averaged 200 rounds an
hour.*

The British artillery fire opened in retaliation was heavy but
erratic (*planlos*), and slackened about 5 p.m. to increase again about

* “History of the 9th Reserve Jäger Battalion.”

two and a half hours later. A heavy battery firing from Bully Grenay was able to do considerable damage to the troops assembled on the extreme right of the attack, where the German trenches, on the north-western slope of the Vimy crest in front of Givenchy, lay open to the view of the British farther north.

At 7.45 p.m. the German guns lifted from the British front line to about 170 yards beyond, and the infantry advanced a moment later. On the extreme right No. 5 Company of the 163rd Regiment at once encountered artillery and trench-mortar fire, and soon suffered casualties from rifles and machine guns defending a crater in advance of the British line which was 450 yards away. The bombardment did not appear to have done much damage, and it was difficult to negotiate the British wire ; but Lieutenant Hilmers led his men forward with great resolution, and was the first to enter the British trench. There was some hand-to-hand fighting before the defenders fell back to their second position, which they seemed content to hold, for no counter-attack developed on this part of the front. A platoon of No. 8 Company came forward to link up the new line with the assaulting troops on the immediate left.

The centre of the 163rd Regiment's attack had only reached its own wire when it was enfiladed from the right by rifles and machine guns, but this did not stop the advance, although a company commander, Lieutenant-of-Reserve Schulz, fell badly wounded. The British wire, which proved to be only slightly damaged, was cut by hand and the British were bombed in their trench, which was eventually captured after bloody hand-to-hand fighting.

On its left front the 163rd found that the artillery preparation had been so effective that it was impossible to locate the British defences amongst the chaos of shell holes. Here the British shells were bursting too high and too far behind to hinder the stormers, who, unable to recognize their objective, over-ran it and approached a trench several hundred yards beyond. Lieutenant Köhler, who led his company walking-stick in hand, was badly wounded, but this trench was captured. Lieutenant-of-Reserve Marpmann, who assumed command, soon realized that he was too far forward. He was being shelled by his own artillery, whilst a white signal rocket showed that the remainder of his Regiment, on the right, were over 400 yards in his rear. There seemed nothing to do but to get back into the general line, and this retirement was carried out, except upon the extreme left, where a platoon under Lieutenant-of-Reserve Wohlers still hung on to the forward position, having got into touch with the right wing of the 86th Reserve Regiment.

Now the British came on again and occupied the trench which had been vacated. Marpmann led another advance and recaptured the position he had abandoned. Here he proceeded to consolidate, and, by means of green signal lights, managed to prevail upon the German gunners to lengthen their range. The neighbouring company of the 86th Reserve Regiment soon afterwards sent over a message to ask that the position should be held, as it also had overrun its objective. But the difficulty was to link up with the troops on the right.

An endeavour was made to throw back the right flank, but the distance was too great to be covered ; it was the opportune arrival of a platoon of No. 8 Company which enabled the gap to be filled. This platoon had been sent forward by Captain Weede, commanding the assault troops of the 163rd Regiment. Consolidation of the captured line could now proceed and much progress was achieved during the night, a start even being made on the construction of new dug-outs.

The prisoners amounted to 5 officers and 44 other ranks, belonging to the 1/6th,* 1/7th, 1/8th and 1/20th London Regiment, and no less than 240 British dead were found in and near the captured trenches. The Regimental casualties suffered in the assault amounted to one officer and 44 others killed ; 4 officers and 108 wounded ; and 11 men missing. Among the spoils of victory the 163rd Regiment counted two machine guns, three trench mortars, about 50,000 cartridges, “ thousands of hand-grenades,” numerous rifles, and a quantity of equipment, including greatcoats and gum boots.

The 86th Reserve Regiment claims an easier victory. Before the hour of the assault a shell of large calibre burst in a crater on the left and inflicted heavy casualties on the stormers assembled there. The company on this flank had great difficulty in deploying, owing to the many craters in its path, and was obliged to begin its advance upon a frontage of 75 yards. Then a British forward post, undamaged by the bombardment, had to be taken by bombers who were sent on ahead of the first wave of the attack. But after these early difficulties had been surmounted, the British front trench was captured without much fighting, most of the defenders coming forward with their hands up. Carrying on the advance the British main line of resistance was taken by surprise, most of its garrison being found in the dug-outs, where they fell an easy prey. Many prisoners were thus captured, and consolidation of a very much

* One company of this battalion was sent up to reinforce the 1/7th London after the attack commenced.

damaged trench was put in hand. Four machine guns which had been buried by the bombardment were dug up.

The Regiment made similar good progress along its whole front, though hindered everywhere at first by machine guns which had to be put out of action by parties of bombers. It reaped the full benefit of the German bombardment, and its machine guns, which came forward with the second wave and were handled with great bravery and tactical skill, did very effective work. Failing to identify their objectives, which, for the most part, had been battered and blown out of all recognition, the companies advanced even farther than the left company of the 163rd Regiment. Caught at last in the barrage of their own artillery, the troops were drawn back some distance and set to dig a new line, which was considered an easier task than it would have been to consolidate the damaged British trenches. So little resistance had been offered that a much farther advance was believed to be feasible here.

Farther to the left the 9th Reserve Jäger Battalion only succeeded after a sharp hand-to-hand struggle, for in many places the British (our 1/7th London Regiment) fought to the last man. Three prisoners were taken, and these stated that it was the general belief that the attackers were Bavarians who gave no quarter. From this it would seem that the relief of the 1st Bavarian Division by the 4th Guard Division at the beginning of May was not known to our troops; or the presence of the Bavarian pioneers retained in the line may have created a false impression.

After reaching their objectives the Jägers had trouble on both flanks. On the left it was difficult to get touch with the 5th Foot Guard Regiment, though this was eventually accomplished in spite of the broken and chaotic condition of the trenches. On the right the 86th Reserve Regiment, by going forward too far, caused No. 4 Company to do likewise in order to conform. This company soon became involved in heavy fighting in the British third line where the German barrage fell upon it. No. 1 Company, and the Foot Guards beyond it on the left, mistook No. 4 Company for British troops and opened fire with rifles and machine guns, causing many casualties. The night was well advanced before the necessary withdrawal and readjustment of the line could be made.

CONSOLIDATION AND THE BRITISH COUNTER-ATTACKS

The 5th Foot Guard Regiment, which had used two companies of its second battalion in its successful assault, was heavily bom-

barded in its new position, and states that "several counter-attacks" were repulsed. In this sector—the extreme left of our 25th Division—the 10th Cheshire fought very stoutly, and received substantial support.

The 9th Reserve Jäger Battalion makes no mention of any counter-attack. The British artillery was not, at first, directed upon the captured trenches, but those in rear, and especially communication trenches, were heavily shelled. The avenues of approach to the new position led downhill, and were thus under British observation. When daylight came the work of consolidation was suspended by general order with the idea of not betraying the position of the new line which, judging from the fall of their shell, the British had not yet been able to locate. The British artillery seemed to have been re-grouped, and the misty weather hindered the German gunners in their counter-battery work.

The front line companies of the Jägers were relieved on the night of the 23rd/24th of May, by which time casualties had grown appreciably heavier, the British bombardment making it difficult to get the necessary material for consolidation up to the front line. This was now shelled with accuracy by the help of air observation, the British machines swooping low over the German trenches. In the evening of the 24th the Jägers were replaced by troops of the 162nd Regiment. With the battalion casualties are included those of the fourth battalion of the 86th Reserve Regiment and of the attached Bavarian pioneers. They are given as one officer and 41 others killed; 8 officers and 179 wounded; and 6 men missing.

Local counter-attacks are mentioned as having been delivered upon the left flank of the 86th Reserve Regiment at 8.0, 9.0 and 10 p.m., on the 21st of May. It was not until after midday on the 22nd of May, when some German shells fell short and a green light was sent up from the trenches as a signal to the artillery to lengthen their range, that the British discovered the exact position of the new line. Soon afterwards it was heavily bombarded, and the British fire did not slacken upon the area in rear. The old fire trenches and communication trenches were practically destroyed, for they could not be repaired whilst this heavy shelling continued night and day.

Cables were laid in this sector, but were so often cut by the British artillery fire that air lines were employed as being easier to repair. But eventually the task was given up as hopeless, and the telephonists were used as runners.

From messages received at Regimental headquarters it had become apparent that the Regiment was still out beyond its objective,

and orders were therefore given by Colonel von Wurmb that the correct line was to be taken up at 1.0 p.m. on the 22nd. But the company commanders could not identify anything—the shattered ground bore no resemblance to the map—and the whole area was so heavily shelled that movement by daylight was impossible. In the evening the British used gas shell.

At 2 p.m. on the 23rd of May “the enemy suddenly attacked the ruins of our position,” but this attempt was driven off by artillery fire. At night a battalion relief was carried out. It was necessary for the incoming troops to move up across the open in extended order, for there were no trenches left which were usable. So shrapnel and machine-gun fire took their toll, and casualties were so heavy that the task of evacuating the wounded proved beyond the efforts of the medical *personnel*, which itself suffered serious loss. One aid post, established in a dug-out, was buried by a heavy shell. Numbers of wounded lay out under heavy fire all next day.

It was at 8 p.m. on the 23rd of May that “the enemy left his trenches to rob us of our spoils.”* There is a tale of bitter fighting—of bombing, short-range rifle and machine-gun fire—which continued most of the night. There were probably many alarms. Casualties mounted so rapidly from artillery fire that two of the company commanders decided to hold their portion of the front line with weak posts, the intervals being covered by the flanking fire of machine guns. This decision they reported to Divisional headquarters, but the message was imperfectly received. The Division judged it necessary to send up additional troops to cover the new gaps in the line, and this movement, carried out over the open as it had to be, caused serious and unnecessary loss.

The British fire had not slackened in the least when the regiment was relieved on the evening of the 25th of May, by which time it had lost 7 officers and 68 other ranks killed, 8 officers and 456 wounded, and 25 men missing.

On the new front of the 163rd Regiment the process of consolidation had proceeded apace, and a considerable quantity of wire was put out. The attack was considered to have been completely successful, the bravery and devotion of all ranks being supplemented by their excellent training and by the splendid organization of the operation.

* There is no British evidence that a counter-attack was delivered on the 86th Reserve Regiment at this time. A counter-attack had been fixed for 8.25 p.m., but our 99th Brigade in this sector did not advance.

The *Granatenwerfer* detachments had rendered admirable service by keeping under fire certain craters in the British line before, during, and after the assault. One detachment was buried by the burst of a heavy shell, but soon succeeded in coming into action again. Cables which were unreeled by signallers who went forward with the storm troops provided a reliable means of communication : it was soon possible to telephone to the new front line. The persistent shell fire caused frequent breaks, but all were promptly repaired. The stretcher-bearers, using tent-squares slung on poles instead of stretchers which would have been impossible to handle and carry over the broken ground, displayed remarkable devotion. Rations were got up to the fighting troops in spite of all difficulties. Before the attack every one received hot food and coffee, and one company was specially detailed to carry hot meals to the front line next day. A good supply of seltzer-water had been placed in the trenches, and each man was given a half-bottle of claret.

There were three counter-attacks early in the night of the 21st of May, and during the first of these a British officer entered the front trench, but was killed instantly. Later the British managed to get in on the right of the line, and were only driven out after a sharp bombing encounter in which Lieutenant-of-Reserve Rottgardt was killed. At 2.45 a.m. the British came on again, this time in two thick waves, but heavy rifle and machine-gun fire brought them to a standstill some thirty yards from the position. Half an hour later another effort was repulsed in similar fashion, captured bombs, rifles and cartridges proving invaluable as all the German supplies had by this time been expended. It is calculated that at least one company of British was concerned in this last counter-attack. Strange to say, the losses of the Regiment in all these encounters amounted to only two men killed.*

Towards morning the British shelled the forward positions with gas, and the work of consolidation was interrupted while every one put on his gas-mask. From dawn onwards the trenches in rear were kept under constant and heavy fire which did not slacken during the whole of the 22nd. After reorganization the front line was held by five platoons with four machine guns.

In the afternoon a counter-attack appeared to be threatening opposite the left, so a barrage was called down and rifles and machine guns opened. There were no further signs of a British advance.

* Our records show that one company each of the 1/8th London and the 1/15th London delivered counter-attacks from the left of the Berthonval sector. The 1/15th London relieved the 1/8th before dawn.

It was noteworthy that the captured trenches received little bombardment, the efforts of the British gunners being concentrated upon the trenches and communications in rear. This fire was so heavy that the battalion relief arranged for the following night, the 22nd/23rd of May, was only carried out with great difficulty and considerable loss.

The bombardment grew even heavier during the afternoon of the 23rd of May, and about 7 p.m. the sentries in the centre and left of the regimental front observed considerable movement in the British lines. The Holsteiners everywhere stood to arms, and about an hour later a counter-attack was launched.

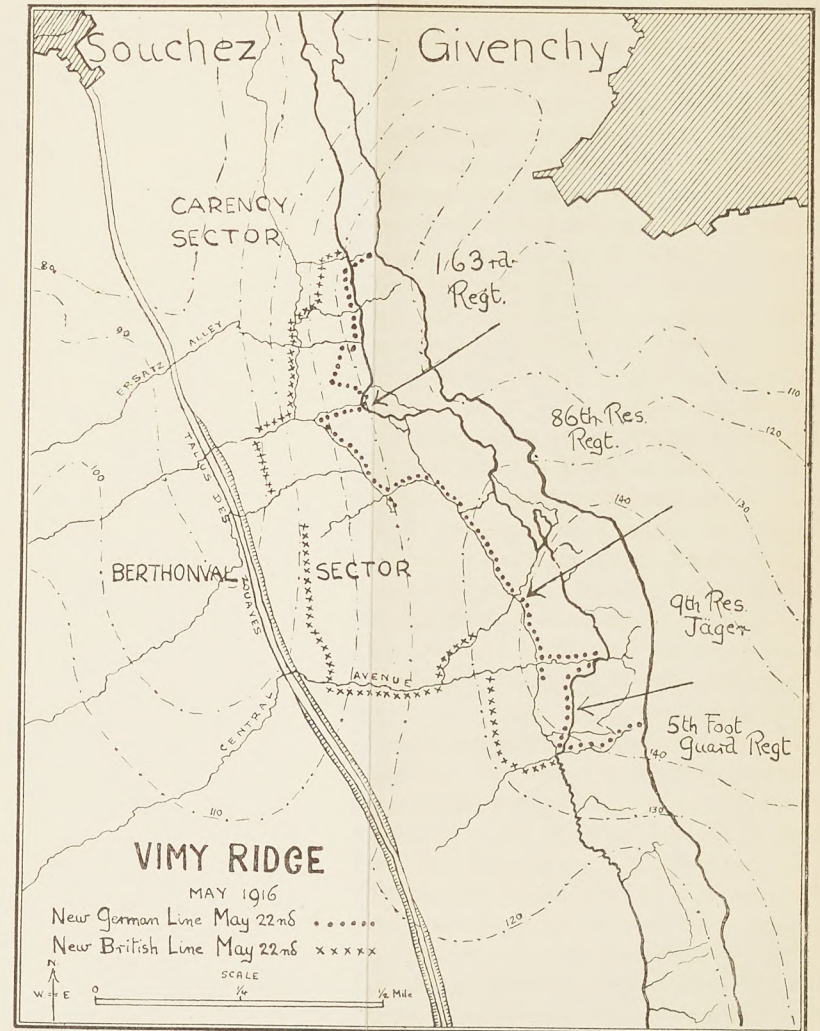
It did not appear to be pressed on the right, where small parties were easily driven off by fire. On the left the barrage prevented the British from closing, but at one point the attackers did get within "throwing distance" of the position, and were only repulsed after some vigorous bombing by No. 4 Company.*

The most serious threat was to the centre of the front held by the Regiment, and here the machine guns in the right sector were able to give valuable assistance with flanking fire. The first wave of the British was repulsed, but the second entered the trenches on the right and in the centre of the company front. There were fierce bombing encounters and much hand-to-hand fighting during which Lieutenant Kaiser was killed. A machine gun received a direct hit from a trench mortar shell which destroyed both gun and detachment, and the situation was critical when the arrival of a platoon from No. 11 Company turned the tide. The British were then driven out and retreated under heavy fire.

Another attempt to advance was frustrated by flanking fire from the left, which had not been seriously involved. But on the right the British still hung on in one place where a post under Lieutenant-of-Reserve Arens had been cut off. This officer was wounded in two places, but continued to encourage his men, who fought stoutly with rifle and hand-grenade until the British were driven back. This was not done until another platoon of No. 11 Company had been brought up. A platoon of No. 3 Company, employed to carry bombs and ammunition, also pressed into the fight: its commander, Lieutenant-of-Reserve Wohlers, led his men gallantly until he was killed.

Three further attempts to counter-attack were dealt with by the

* The counter-attack was delivered by our 142nd Brigade, whose frontage did not extend so far as the right of the 163rd Regiment. And the extreme left of the latter was opposite the left of our 99th Brigade, which did not advance.



THE OTHER SIDE OF THE HILL—NO. VII.

[To face p. 76.]

artillery barrage, and the fighting then died down. The Regiment had lost 43 killed and 102 wounded, but the British must have suffered very heavily, for numerous dead lay in and around the position.

The intensive fire of the British heavy artillery continued until the afternoon of the 24th of May. In the evening of that day it was at last possible to evacuate the wounded, bury the dead—the German dead were taken back and interred at Sallanmines—and proceed with the reorganization of the position.

The 163rd Regiment took a special pride in the " Schleswig-Holstein " operation. Farther to the north, east of the Souchez river, in February 1915, it had—for the first time as a complete regiment—delivered a successful assault when it captured the " Giessler heights " from the French. But this action on Vimy Ridge was regarded as a greater exploit. The troops had advanced against trenches and wire much less damaged than was their objective in the previous action ; and it was considered that the British were much more dogged in defence and more spirited in attack than the French had proved to be.

PRACTICAL PSYCHOLOGY: ITS RELATION TO MILITARY TRAINING

"... the bold offensive spirit which springs from a national determination to conquer. The development of the necessary moral qualities is therefore the first object to be attained in the training of an army."

Thus runs Field Service Regulations, but although the vital importance of "moral" is thus emphasized, the need for a scientific study of its inculcation and maintenance is not yet widely recognized.

Our text-books, our military writers, our commanders urge in season and out of season the necessity of resolution, courage, determination, energy, the will-to-conquer, the offensive spirit, initiative, self-confidence: these are all synonyms for that forceful and resolute frame of mind which it is the aim of our military training to cultivate. It implies what we know as "good moral," but it is even more than that. It is essentially vital, positive and full of "drive": the "martial spirit" in its best sense. It may be defined as the objective, as opposed to the subjective, outlook. While we are unanimous in requiring this mental condition we are given little accurate guidance as to how it is to be inculcated. We are given some practical indications which are of value, but little effort has been made to analyse the basis on which endeavours to instil the martial spirit into men must rest.

Science has provided an aid of which we do not as yet make the fullest use: that aid is psychology, the study of the actions and reactions of the human mind. The psychological side of military training consists in taking a scientific cognizance of human instincts, of suppressing or controlling in the soldier those aspects which are undesirable, and of encouraging and fostering those which are useful.

The promotion of the martial spirit is sometimes resisted and sometimes aided by certain primeval instincts. Take, for instance, the survival instincts, of which one of the strongest and the most

prominent symptoms is the emotion of fear. At first sight the emotion of fear is naturally regarded as wholly undesirable in the military mentality, but yet it underlies a principle of war—security. One of the motives of all measures of security is necessarily a form of apprehension, apprehension of the enemy's actions, that is, fear. But this is disciplined fear. Undisciplined fear, the sub-conscious and imperious demand for self-preservation, which is always at war with the conscious disciplined mind, is the cause of the nervous strain so much in evidence in modern war. Anxiety is wasteful, nothing depletes the vital forces more than this form of emotion, so difficult to suppress and so universal of incidence.

The fostering of the moral of an army must then aim at the suppression, or at least the control, of the emotion of fear. Conversely, our actions must aim at instilling fear in the mind of the enemy, it may be by physical means, it may be by propaganda or suggestion.

Again, the instinct of self-defence—a survival instinct—is responsible for man's natural gestures of self-protection, for instance, the shielding fore-arm, the lowered head. The instinctive gestures of defence are the result of the rapid natural coordination of eyes and muscles which is the groundwork of the physical and weapon training of the soldier.

The "herd instinct" is valuable if under control, and, equally so, dangerous out of control. *Esprit de corps* is based on the "herd instinct." The cohesion which comes from the sense in the individual of membership of a definite body, is an important *raison d'être* of all military organization. The sense of companionship, as much as the bonds of discipline, keeps the individual firm in moments of danger.

But the "herd instinct," if a good servant, is a bad master; panic, that dread phenomenon of peace as well as of war, is the manifestation of undisciplined survival and herd instincts; it is essentially instinctive and unthinking. Discipline is the enemy and preventive of panic. It is habit based on reason. The stimulus inducing panic in an undisciplined brain will produce a diametrically opposite effect in the disciplined brain; although the same instincts are at work, their manifestations are completely opposed. In the first the undisciplined survival instinct counsels a thoughtless flight and the undisciplined herd instinct an unreasoning congestion. In the second the survival instinct controlled by disciplined habit almost automatically brings about the appropriate defensive measures, and the disciplined herd instinct induces an ordered cohesion.

Modern tactics and weapons demand a measure of decentralization in the smallest units which runs counter to the herd instinct. Troops have nowadays to think and to fight for themselves. Initiative is required of the most subordinate. The shoulder to shoulder fight of our forefathers, which the controlled herd instinct did so much to make effective, is no more. The herd instinct has then to be handled in a different fashion to that of a century ago. It must be idealized in the form of loyalty, comradeship and cooperation. The physical side of the herd instinct must be strictly controlled and the disciplined mental side developed to the utmost.

Instincts are ineradicable, but they can be controlled and transmuted, when not only do they become not undesirable but may be, and are, useful. What are the means by which a martial spirit, in which the instincts are so balanced and controlled, can be fostered? They are to be found in the correct handling of three factors, each of which has its effect on the soldier's mentality; his material well-being, his technical and physical training and his emotions.

Experience in the practical handling of men has taught us the value of unremitting care of the soldiers' body, and particularly of the stomach, on which, Napoleon declared, his Army marched. Fatigue, hunger and exposure have an immediate and depressing effect on the mind. Burning national fervour and high crusade may well carry starving and ragged troops to victory, but more often the enduring fighting spirit, the grim determination, the persistent will-to-conquer has little more spiritual basis than the prosaic full belly.

Consideration for the material well-being of the soldier must not comprise the bodily comforts of the soldier alone, but must be extended to his dependents and to his own future. If we are to get good work from a soldier we must not only keep him fit and well but we must keep from him, so far as possible, all avoidable anxiety as to the future of himself and his dependents. This is realized in the British Army. The family of the soldier is, generally speaking, at least as well cared for as it is likely to be in civil life.

As regards the prospects of the soldier after discharge much has been done, but much still remains to be done; we now realize that in the best interests of the nation it is necessary not only to make a good soldier of our raw material, but, so far as possible, to return a sound and useful British citizen to civil life. Excellent work is being done by the Vocational Training system, to ensure that as many reservists as possible and a percentage, at least, of time-expired men should have a trade when they leave the Colours. The more

subtle mental effect which a reasonable hope of certain future employment on his discharge has on the mind of a soldier is not perhaps always perceived. It must doubtless react on a soldier's efficiency in the last few years of his Colour service if he has or has not a certain expectation of future employment. The good effects of the Boys' Training Establishment, of vocational training, and of the many organizations for employment, lie not only in their obvious material advantages, and in their attraction to recruits, but also in the efficiency which happiness and freedom from anxiety confer on the individual serving soldier. The earlier the soldier can give serious consideration to his after-career, and the earlier a definite prospect is opened to him, the more will the Army benefit. With the present limited resources in vocational training the reservist is generally given preference over the man who has extended his Colour service. There is a tendency that the "happiness" of the more senior soldier—the non-commissioned officer as a rule—may in this way suffer, with a possible diminution in efficiency, which must have its detrimental effect on the Army.

The knowledge of the soldier that he is well versed in his weapons and in the tactics of his arm, that his body is trained to endurance and hardship, that his comrades are alike competent, and, what is perhaps most important, that he is well led, has the valuable mental effect which we describe as self-confidence, self-reliance or assurance. It also promotes that idealized herd instinct which we know as *esprit de corps*. The aim of all training is to produce "habit." Habits, good or bad, can be so ingrained that they become nearly instinctive. Here, then, we come to the chief means by which we can combat undesirable manifestations of the instincts. Human instincts are buried so deep in the sub-conscious mind that although the conscious mind can, by reasoning, expose their futility or undesirability, it cannot inhibit them in moments of stress when the reasoning powers of the conscious mind are often in partial or complete abeyance.

The inculcation of habit teaches the mind by constant repetition to react in certain prearranged fashions to certain foreseen stimuli. Training is designed to make habit superior in effect to instinct. The natural effect of such stimuli, as dictated by the instincts, is, as already stated, often quite the reverse of the effect inculcated by habit. As a very elementary instance, the sub-conscious survival instinct of a trained soldier facing a bayonet charge may be flight, but habit compels him, without conscious mental reasoning, to take up a fighting attitude to repel the charge. It must not be forgotten

however, that the reaction is not in practice as simple as this, but that many reactions are simultaneously present. Other stimuli present themselves at the same time, arousing it may be the herd instinct to stand with his comrades, perhaps the higher form of the survival instinct, that is the impulse to fight in defence of himself and his belongings, or it may be that comparatively superficial emotions induced by anger, patriotism, religious or even alcoholic exaltation may, for the time being, take the upper hand.

The emotions of the soldier do not perhaps always receive the attention they deserve, and yet we are constantly being reminded of them. For instance, we speak of a "happy" or of an "unhappy" regiment, still more often in the Royal Navy of a "happy" or of an "unhappy" ship. What is this unhappiness? It is certainly not the necessary outcome of strict discipline, or the most efficient units would be unhappy. But it is often the effect of repressive discipline and lack of consideration on the part of superiors. This must point to inefficient leading, to a failure to understand their subordinates, which usually is a symptom of muddled thinking and mental laziness.

Another fruitful cause of unhappiness is boredom. The modern soldier is trained to think for himself, he is encouraged to keep an active mind. An active mind requires nourishment which it is the business of the officer to supply. The inculcation of military habit necessarily involves a constant repetition which, unless skilfully diluted, must become boring to the intelligent individual. The fostering of interest in the daily military life of the soldier is not easy, and deserves and requires intelligent study from the officer. It is only occasionally that one finds a specially gifted officer who can *ex tempore* provide interest for his men day by day. For the average officer it is essential that he has a programme worked out in advance. His lectures, his drills, and the lessons which he hopes to drive home, must all be cut and dried in his own mind before he goes on parade. The training manuals rightly draw attention to the prior preparation of training schemes and programmes, but they do not perhaps always emphasize that this principle must be logically applied right down the scale. It is just as important that the platoon commander should have his programme of work cut and dried for to-morrow morning as it is for the commanding officer to have his programme for the training season. *Ex tempore* work may be useful in the brilliant few, but it does not lead to efficiency in the average many.

There is a tendency to consider that the way to maintain a good regimental spirit, moral or happiness, lies only in occupying a man's

spare time with all sorts of activities, principally of a physical nature, such as games and so on. The extremely valuable function of organized games in military training is widely recognized, but a sense of proportion is sometimes lacking. The credit for the maintenance of a regimental spirit is given largely to games. In this way the fostering of the interest factor is concentrated on the non-military activities of a unit. This tends by implication to the impression that military duties and training are necessarily without interest. There is no reason why interest should not be maintained throughout a unit's activities, military as well as non-military, provided intelligent study is devoted to the matter.

Touching the subject of games, it is suggested that in many units active participation in organized games is still a matter for the few, rather than the many. Recreation grounds are provided and maintained by Government at considerable expense, but still, notwithstanding official injunctions to the contrary, tend to be used by picked teams rather than by every individual in the unit. Given the extremely valuable function of organized games in military training, it should be the aim that every man should play in an organized game at regular intervals. It is suggested, therefore, that platoon football for instance—in which every man in the platoon participates—should occupy a definite place in training programmes. It is a mistake to relegate recreational training solely to afternoons as is often done. The result is that the recreation ground is unused in the morning, while in the afternoon it is monopolized, naturally enough, by teams of those who excel. Military training and recreational training should both continue throughout the day so that every man should receive benefit from each in appropriate proportion. The widely prevalent plan of allotting afternoons alone to recreational training means that, more often than not, 20 per cent. indulge in recreation, while 80 per cent. watch or loaf, or indulge in desultory “kicking about.”

It is not meant to infer by this that a man should have no leisure. Leisure in appropriate proportion is an extremely important factor in maintaining a sound mental tone in the individual. Too much leisure is as harmful as too little. But recreational training as such should not be mixed up with leisure. It may be that individuals may wish to play games and so continue their recreational training during leisure hours; if so, so much the better, but nowadays the advancing mental standard of the soldier demands leisure occupation other than the purely physical; it should be the aim to encourage and to provide opportunities for this.

Educational training, curiously enough, not infrequently suffers indirectly through the common misunderstanding of the place of recreational training in the training programme. It frequently happens that educational training takes place in the afternoon when most soldiers are nominally engaged in recreational training. Owing to the fact that in practice a large portion are unoccupied and do not "re-create," these recreational periods are naturally regarded as leisure, which should be quite a different affair altogether. Those that are being educated quite humanly tend to lack enthusiasm if the rest of their fellows are at leisure. Thus education suffers.

The writer's contention is, then, that as they are all essential, military, educational and recreational training should all find places in the duty training programme, and should not necessarily be confined to any one period of the day. There is no reason why recreation and education should not take place in the mornings and platoon training, for instance, in the afternoons. The facilities provided for units would probably be much better employed if the whole day were regarded as available for any or all of them. However convenient it may be to cram all strictly military training into the mornings, it does undoubtedly lead to the monopolization of recreational facilities in the afternoons by the select few and to an insidious effect on the soldier's mind which is but little appreciated. That effect is the habit of considering that all work normally finishes in the Army at the dinner hour. This again leads to two effects, both undesirable. The first is that when a soldier is required to work in the afternoon he gets the impression that it is something out of the ordinary. Enthusiasm will probably be lacking, it may be that resentment will be felt. The second, which is even more important, is that this half-day impression will follow a soldier on discharge to civil life. Habits are persistent. This habit cannot be regarded as any other than injurious to the man and to the community in civil life, where there is no room for the half-day except on Saturdays.

PRIVATE SOCRATES AND THE DEFENCE OF CIVILIZATION

By J. M. SCAMMELL, Major, O.R.C., U.S. Army

SOCRATES was a fighting man. In his day campaign badges were not known, or he would have worn three : one for Potidæa, one for Delium, and one for the campaign of Amphipolis.

Alcibiades and Socrates were tent mates. At Potidæa Alcibiades was wounded. Despite the enemy, Socrates rescued his stricken comrade, and saved his armour also. The wreath for valour in that day's fighting went to Alcibiades. It pleased those in authority to favour a rich and well-connected man. It pleased the public. It pleased Alcibiades. It pleased Socrates too. Rarely has the giving of honours been so easy : it satisfied all but justice.

At Delium the Athenians were worsted by the Spartans. They were retreating in bad order. Socrates, a private foot-soldier, was in the rearguard. Lofty, resolute and cool was his bearing. Calmly he eyed both friend and enemy. Even the warlike Spartans hung back. They did not like to molest so stout and formidable a foe. The gallant and brilliant Alcibiades, now in the cavalry, trotted up to cover the withdrawal of his friend.

As a warrior Socrates was as notable for his endurance as for his courage. Toils, cold and hunger left him quite unmoved. Bare of foot he walked through snow and ice where others, shod, could scarce endure the cold. Socrates was an ideal soldier.

He was no less a philosopher for that. Once he stood from dawn till noon absorbed in thought. His comrades gathered round to see how long he would stay. When night-time came he pondered still. How late would his meditation last ? Some Ionian soldiers took their beds outside their tents to watch and see. Dawn came. He was still there. Sunrise came. Socrates turned to greet the god of day with prayer ; then went his way.

What was he thinking on ? Were his thoughts that time of war ? If not on that occasion, they sometimes were ; for Socrates reached a

full and systematic theory of war. This aspect of his genius is rarely given notice. When he died his spirit left two heirs : Plato and Xenophon.

Socrates called himself a "gad-fly." He stung his fellow-men to thought. He knocked their smug illusions about their ears. This, the destructive aspect of his method, is unduly stressed. It may be true that his was a method rather than a doctrine ; but the doctrine, too, was there. He gave his method to the complex minds ; his doctrine to the simple. From the doctrine Plato profited but little ; and Alcibiades not at all. With Xenophon it was not the same. He was a practical man, interested in plants and dogs, in horses and in men. He took the teachings of Socrates, as a child, quite literally. He was probably still plastic when he came under the spell of Socrates. His dialogues seem faithful, true reports.

Plato, too, may have fought in the wars. He probably did. It was the law that he should. But Plato was no soldier. He was purely the philosopher. Only in their main outlines, as general in their application, does Plato describe the Socratic doctrine of war. He speaks, indeed, of courage, self-control, vigour and endurance. Thereafter Xenophon and Plato part company. Where Plato mentions music, Xenophon speaks of physical exercise for training. Plato is only Plato ; but Xenophon is Socrates. Through all his writings there is woven the Socratic doctrine of war : to train the soldiers to desire to be brave ; as a shepherd, to care for the welfare of the soldiers ; and to place the best in front and rear.

To do these things, to lead men by their better natures, calls for more than skill in tactics : it calls for knowledge of human nature ; it calls for high character to set the example. Commanders are those who know how to command. The good general tries to render happy those whose lives lie in his keeping. This is the abiding spirit of the Socratic doctrine.

There are many close parallels between the "Memorabilia" of Socrates and the "Cyropædia." One story, much alike in both, may be told as follows : A young Hipparch (could it have been Xenophon himself ?) had just received his office. He was filled with that pride which only a young cavalry officer can know. The great teacher rallied him playfully upon his dignity and knowledge. Then he asked :

"Why did you wish to become a Hipparch ? Surely it was not in order to ride first among the horsemen, for the horse-archers do that."

"That is so," replied the youthful Hipparch.

"And it was not in order to be noticed, for even madmen are noticed by every one."

"That is true, too."

"Then was it not that you expected to make the cavalry better, that in case of need, you as an officer might benefit the State?"

"I certainly hope so."

"That is honourable in you. But, if you command, you will take charge of both horses and troopers?"

"Yes."

"Tell me, then, first how you expect to make the horses better."

This the fledgling officer thought was no affair of his: it was the business of the troopers themselves. Socrates showed him why it was his affair.

"Your reproof is just," said the young man; "and I will try to look after my horses the best I can."

"Will you not try also to make the riders better?"

"I will."

"And have you considered also how to make your troopers obey you?"

He had not.

"You are doubtless aware," said Socrates, "that in all circumstances men most willingly obey those whom they consider most able to direct; for in sickness patients obey him whom they think the best physician; on shipboard the passengers obey him whom they think the best pilot. In spinning, too, women direct men."

The lad was a good lad. He was impressed by that magic personality. He was depressed by the revelation of his own ignorance. Humbly he asked questions.

"If, therefore, Socrates," he said, "I should myself appear the best horseman among them, will that be enough to induce them to obey me?"

"If you can convince them in addition," said Socrates, "that it is better and safer to obey you."

Such precepts appealed to the generous nature of Xenophon. If he was simple, it was the simplicity, not of dullness, but of high-mindedness. Before accepting the invitation of his friend Proxenus to go with him to the war of Cyrus against the Great King, he asked the advice of Socrates. In Persia he saw Clearchus, the Spartan, a stern driver of men. Trusting in his courage and tactical judgment his men gladly followed him in battle. But in the camp they rebelled against his grinding discipline. Cyrus seems to have embodied the Socratic ideal of leadership. His was a warm and

magnetic personality. He drew men after him by his generosity and charm. Him, at all times, the soldiers gladly followed.

After the stern Clearchus was no more, and the gallant Persian prince was left a bleeding, headless corpse, Xenophon was elected general. He tried his theories. They brought him to supreme command and brought his Army through such trying times as few commands have faced. The retreat of the Ten Thousand Greeks is still a military classic.

Xenophon returned to Greece. He served in the Spartan Army. At length he retired to his fields, among his dogs and horses, where he wrote the immortal "Anabasis" of Cyrus. He also wrote another famous work: for the "Cyropædia" he drew not only from his now dead master, he drew not only from his native Athens, but also from the Spartan military institutions and those of Persia, idealized by his contact with the charming Persian, Cyrus. In that romantic novel Xenophon reveals his doctrines of command.

About the same time, also under the influence of Socrates and the Sophists, another Greek was writing of things military. This was Æneas, called Tacticus. It is supposed that he is the same Æneas of Stymphalus whom Xenophon mentions in the "Hellenica" as having been in the battle of Mantinea. His is a text-book on the technique of tactics, but does not deal with the theory of command.

It appears that the influence of Socrates upon the art of war has been notable down to the present day. It is easy to show that all great commanders of modern times, directly or indirectly, have drawn upon Xenophon. Is it also true of other ages?

What of Alexander? Where did he learn his mastery of war? His tutor was Aristotle, who was the pupil of Plato, the disciple of Socrates. That may mean much or little. It may be significant that, as Xenophon accompanied Cyrus and wrote of his campaign, so Arrian accompanied Alexander, calling himself a Xenophon, and naming his book the "Anabasis." That Alexander was ignorant of or neglected the most important works of his time—or of any time—on warfare, it is not reasonable to assume.

Pyrrhus valued military scholarship and left his own commentaries. He caused an epitome of Æneas to be made. It does not seem likely that he would not have known his Xenophon. Pyrrhus, when he went to Italy, took his knowledge with him; but he did not leave it there. Pyrrhus found in Italy no equal in the arts of war; but he found his masters in the science of hard fighting. The stern, virtue-bitten warriors of the Roman Republic cared nothing for

finesse. They only knew how to hurl their well-knit legions on the enemy and deal him doughty blows. Pyrrhus won ; but at a cost that has made his futile victories a by-word. We can see now the captain whom Hannibal himself owned as his superior at command, wiping his beaded brow as he remarked : " One more such victory and I am a ruined man ! " Nor did he stay to win another. He was Greek in his moderation. He followed the precept of Lysander : " He who cannot make the lion's skin go round, must needs patch it out with that of the fox."

This the Romans had not learnt to do. The disaster of Cannæ was the result. It had not been in vain that the Barca family of Carthage had sent to Greece for a Spartan teacher of the military art. Hannibal knew no master until young Scipio came.

Scipio's friend was Polybius the Greek, who wrote on tactics as well as history. Scipio carried with him in the field his Xenophon. The campaigns of Scipio Africanus afford good illustrations of the doctrines of Socrates in action. Captain Liddell Hart's biography of Scipio lets us see the mind of Africanus working, and reveals his unified conception of war. It shows him one of the greatest masters of the art of fighting that the world has ever seen—perhaps the foremost.

Xenophon is the leaven in the bread of Roman military writings ; Byzantium knew him too.

Procopius, who followed Belisarius to the wars as his adviser, was conscious of the analogy of his rôle to that of Xenophon. Or, if he were not and his histories be true, then it was Belisarius who was thinking of the " *Cyropædia*." This much is certain : that, even to his care to placate the Libyans, Belisarius followed faithfully the doctrines of Socrates. Perhaps it was not conscious imitation. It did not have to come to him direct. From the time of Anastasius I to that of Basil II the Byzantines had a series of sound military manuals based upon the ancient writers on the art of war.

In his " *Strategicon*," Maurice everywhere shows the influence of Xenophon. Allowing for the changes in arms and methods, the tactics of Byzantium were the tactics of Xenophon. The influence perhaps was indirect. It may have come through Onasander. His works still live, and we may judge by reading them how far he followed Xenophon. The parallel is close. The " *Strategicon* " was the Field Service Regulations of the Armies of Justinian, which governed Belisarius.

Another important manual of the Byzantine Army is the " *Tactica* " or Military Institutions of Leo III. The author says :

"The military leaders, lazy and ignorant, neglect to seek knowledge from the tacticians of antiquity whom they consider obscure and useless. I have not hesitated to delve in them and labour amongst them. . . . I have therefore carefully searched for what the ancients and moderns have written upon the science of tactics and the duties of a general."

"The Duties of a General" is the title of Onasander's work. Whole passages of Onasander were taken bodily over into the "Tactica" of Leo. Roman military writers were also used. Their writings, as well as those of Onasander, may be traced to Xenophon.

That "War must be studied with diligence" was the 24th of Leo's maxims. It was the first of Socrates. That is what he taught the young Hipparch. That is what he drilled into Alcibiades. That is what he told Pericles. Pericles took heed. The monarchs of Byzantium, too, took heed.

It is well that they did. While the West was flooded by barbarian invasions and the light of learning flickered out or dimly burned a blue and sickly flame in lonely monasteries, Byzantium guarded ancient cultures. The Army was the guard. Equalled by its enemies in tactics, arms and ardour, often surpassed in numbers, that Army had one priceless asset which redressed the balance: it was not that Greek fire which flashed from brazen tubes, but that spiritual fire of Greece that burned within the hearts of men. It was when the art of leadership was wanting that great disasters came. But these were not the rule, as some have said, or else the Eastern Empire must have fallen soon. For almost a thousand years the Byzantine Army held the fighting line for Western civilization against powerful armies skilled in war. The Army that could do so great a deed was no mean army.

Soldiers commonly face two dangers: by honest steel from open enemies, and by treacherous poisons from their countrymen. Socrates faced his death in battle for his native city; he lived his useful lifetime for his city; he gave his life in the end, like a good soldier, for his city. The cup of ingratitude, more bitter than the hemlock, he drained to give his city and the world this priceless soldier's heritage:

"Hear the truth, men of Athens! The post that a man has taken up because he thought it right himself or because his captain put him there, that post, I believe, he ought to hold in face of every danger, caring no whit for death or any other peril in comparison with disgrace."

THE LANCE

BY CHARLES FFOULKES, O.B.E., F.S.A.

THE lance, which had been the principal weapon of the mounted man from the Norman Conquest up to the beginning of the seventeenth century, was for some unknown reason discarded for over two hundred years, and till the end of the eighteenth century, with the exception of oriental light cavalry, lances were not used in any of the European armies. It was to Napoleon that the general introduction of the lance into Europe was due, and the success of his "Polish" lancers convinced military authorities in England that the lance was a formidable weapon capable of producing a great moral effect on infantry. On the 21st of September 1800-1801, the 3rd French Hussars paraded with the lance, but the men were badly trained and according to Masson "*Ils ne tenaient pas une arme, ils portaient un gaule*" (pole).^{*} In 1816, experiments were conducted by Lord Rosslyn and Captain J.G. Peters,[†] of the 9th Light Dragoons, who trained men with 16-ft. lances bearing small union flags, and, on the 29th of April, a parade of 50 men of the 9th, 12th, 16th and 23rd Light Dragoons was held at Pimlico, the general public being admitted to inspect this new branch of the British cavalry.[‡] Although the regiments were complimented by the King, there seems to have been severe criticism of their performance, for Colonel de Montmorency speaks of "the imperfections of the lance exercise by the three Pimlico Divisions so universally found fault with."[§] These remarks taken in conjunction with Masson's account of the first French Lancers go far to show that the lance is only a practical weapon after long and severe training, an essential which is always insisted upon by all writers on the subject. The inordinate length of the staff—identically the same as that of Cromwell's infantry pikemen—was soon found to be impracticable, and a staff of 9 ft. long was adopted early in the nineteenth century and, with

• See "Cavaliers de Napoleon," F. Masson, 1896.

† See Histories of the 9th and 16th Lancers.

‡ Light Dragoons or Hussars were transformed into Lancers as follows: 5th in 1858; 9th in 1816; 12th in 1816; 16th in 1818; 17th in 1822; 21st in 1897; 23rd in 1817.

§ See "Exercises and Manœuvres of the Lance," Colonel de Montmorency 1820.

variations of a few inches, has been the standard length ever since. Major A. S. Jones, V.C., writing in 1862, recommended an eleven-foot lance in order to make it superior to rifle and bayonet.

In 1881, Colonel Brix,* of the German General Staff, advocated a short lance of 6 ft., held near the butt, as a more convenient weapon, and I understand that his views are also held by some authorities to-day, who have suggested that the "pig-sticking" spear is a better weapon than the 9-ft. service lance.

A variety of blades, including the small pike-point, the wide spear-head, and the leaf-shaped blade, were all tried, and eventually the three-sided point, similar to that of the bayonet, was adopted. In 1820 a steel ball about 2 inches in diameter was added to the base of the point to prevent undue penetration and to make withdrawal easier, which necessitated a heavier shoe to maintain the proper balance. In this year a wooden ball was carried on the point to guard against accidents in peace time, but it could not have been in use for long or in large numbers, as only two of these specimens are known to exist at the present day.,

General Mercer,† who commanded the 9th Brigade Royal Artillery at Waterloo, brought back a French lance given him by a prisoner, a Lancer of the Guard, which he deposited in the Rotunda Museum in 1823. It was removed by Colonel Vandeleur of the 9th Lancers, who submitted it to a Committee which sat in 1827, and eventually produced a sealed pattern lance.‡

At first, using the Cromwellian pike as a model, the head was held by "langets," or cheeks of steel, of varying lengths and riveted to the staff, which were considered to be some protection against sword-cuts. In 1868 these were discarded and the head was socketed and fixed to the staff with shellac, an innovation which was strongly criticised by many cavalry officers, who instanced cases of lance heads being cut off by Indian swordsmen.

Several suggestions were made to obviate this, Colonel G. Money, of the Central India Horse, producing a model of a lance head with one langet to which the pennon was attached and certain experimental lances being issued with socket heads 22 inches long held in place with shellac and pins.

From 1816 to 1868 the staff was of ash impregnated with linseed oil and tar, but at the latter date male bamboo was adopted. The drawbacks of the bamboo were twofold, for the supply was never

* "*Gedanken über die Organisation, etc. der Cavallerie*," Colonel Brix, 1881.

† See *Journal of the Waterloo Campaign*, 1927.

‡ See War Office "Submissions," 1827.

constant, and furthermore the Indian contractors frequently concealed worm holes and flaws by stoppings, so that it became almost essential to test every lance. Eventually, in 1885, the ash staff was re-introduced and was used when bamboo was not available. European armies experienced the same difficulties though they all favoured the bamboo for a staff. France had great hopes from her colonies in Tonquin, but Germany, having no tropical colonies, experimented in 1890 with a steel staff, which is now the standard weapon and has been adopted also in the French Army. One of these experimental lances was made to unscrew in the centre, and a German trial lance was made to fold.

The pennon, after the first experiments with union flags, has always been a party-coloured red and white flag attached in various ways: first, with brass eyelets fitting over three studs on bands at the lance head and kept taut by a rubber strip, the studs being pierced to receive a thin locking rod; and later, by sewing the flag to a thin plate with studs which engaged in keyed slots in the lanquets. From 1868 onwards the pennon was attached by hide laces passed through three eyelet holes. About the year 1840, a flimsy hand-guard of steel rod was tried, fastened to the staff over the grip with screws; but this, needless to say, was very soon discarded, for even in peace time it was very easily knocked out of place. The sling appears in all early patterns, but no records of the date of its use are found till 1884.

In 1883 a leather protector was added, both to provide a grip and to prevent the chafing of the staff by the carbine butt when slung. In 1889, when the ash staff was re-introduced, the protector was discarded and a grip of white hide wrapped twelve times round the staff at the balance point was substituted. In 1896 a small "D" ring was whipped to the staff, at first with a leather lacing and afterwards with wire, so that the lance resting in the lance bucket on the stirrup could be attached to the saddle when the rider dismounted.* This was evidently found to be inconvenient when remounting and was discontinued early in the present century.

The shoe was at first a blunt point socketed on to the butt. In 1860 this was superseded by a flanged shoe with square point and short langet, and in 1868 the langets were abolished and the shoe fixed like the head with shellac.

All through the nineteenth century military writers discussed the lance and its value, and, in view of the strong views expressed in its

* General Bernhardt, author of "Cavalry in Future Wars," considers that the bucket should be larger to prevent the lance being jerked out when slung.

favour, it is interesting to find officers who had, in these days, reputations on cavalry matters, writing in opposition.

Denison, who was the first modern writer to treat cavalry operations exhaustively, considered that only half of the heavy cavalry should be armed with lances, the remainder with sabre and revolver ; * but he qualifies this by saying that the lance can only be of use in the hands of a perfectly trained man and in a *melée* it is awkward and dangerous. General Stephen Lee, quoted by Denison, strongly advocates the revolver as the favoured arm, but considers that if lancers exist they must also have swords, presumably for the same reasons put forward by Denison. Major-General Sir Charles MacGregor† is definitely anti-lance, and states that he would not recommend the adoption of the lance in any cavalry regiment except for highly trained men in Indian campaigns. In 1871 French cavalry officers were apparently so much impressed by the value of firearms for cavalry that they petitioned the Government to abolish the lance, and in this year nine regiments of lancers were dispersed and absorbed by other cavalry regiments ; but, about the year 1888, the lance was re-introduced into ten or twelve regiments of the dragoons, for the front rank only. Marmont had previously made this suggestion, for he considered that once lancers had joined issue with the enemy, it was necessary to have the second rank ready to follow up the attack with the sabre.‡

Captain Nolan bears out Marmont's contention, for he describes a charge of the 16th Lancers at Aliwal in 1846, when many of the lancers were killed in the *melée* by Sikh infantry.§ Major-General M. von Czerlieu of the Austrian Army, writing in 1901, is strongly against the lance for several reasons. First, because it is too "humane" and lance wounds are quickly healed ; secondly, because it is more liable to break than the sword ; and thirdly, because he considers that the "reach" of the swordsman is greater than that of the lancer. He further urges that it hinders rapid mounting and dismounting, it increases the weight carried by the horse, it is liable to betray the position of troops, tangles in woods and forests, and, in fact, has all the drawbacks and no advantages. He concludes by saying that the friends of the lance "are pursuing a phantom." ||

On the other side, it is unnecessary to quote the views of all the

* See Denison's, "Modern Cavalry," 1868.

† See "Life and Opinions of Major-General Sir C. MacGregor," 1888.

‡ Marmont's "Modern Armies," translated by Captain Lendy, 1865.

§ See Nolan's "Cavalry," 1854.

|| See "The Lance as the Weapon of Cavalry," Journal of the R.U.S.I., Vol. XLVII.

advocates of the lance, for with the above exceptions all cavalry officers and writers, of all nationalities, have expressed themselves strongly in its favour till the Boer War brought the rifle into prominence as a cavalry weapon, and the war of 1914-1918 produced an entire change in cavalry operations.

In all the discussions which are to be found in the Journal of the Royal United Service Institution and elsewhere, on the value of the lance, sword, pistol and carbine for cavalry, the unanimous opinion of cavalry officers of all nations is that whatever other weapons the cavalryman carries he must carry the lance. That this opinion was strongly held in Germany is noted by Colonel Graves of the 20th Hussars, who states that whereas in the middle of the nineteenth century Germany had one lancer regiment to four other cavalry regiments, in 1890 the German Emperor ordered that every one of the ninety-three cavalry regiments of the German Army should be armed with the lance.*

The results of cavalry operations during the Boer War produced many interesting books and papers on the value of the rifle as a cavalry weapon as preferable to lance or sword. Bernhardt† and Erskine Childers‡ both wrote strongly on the subject, backed by the opinions of Lord Roberts and Sir John French (Earl of Ypres). But before these works were published the fate of the lance had been sealed. In 1903 it was abolished except for ceremonial parades, and officers were reminded that in future the rifle was the chief weapon of the cavalry.§ In 1909, however, this order was rescinded and the lance again became the service weapon of the Lancers,|| only to be abolished again in 1927.¶

The 16th Lancers claim to have been the first British Regiment to use the lance in action in India about the year 1822, and from that date the Lancer regiments of the British Army have covered themselves with glory whenever they have been engaged.

In the late war the 12th Lancers were in action at Moy on the 28th of August, 1914, and the 9th on the Marne in September, while the Indian Lancers gave a good account of themselves in Palestine.

A small exhibit has been installed in the Imperial War Museum, South Kensington, showing the different types of lances in use in the British Army from 1816 up to the present day.

* See Journal of the R.U.S.I., Vol. XXXIV.

† See General von Bernhardt's "Cavalry in Future Wars," 1906.

‡ See Erskine Childers' "War and the Arme Blanche," 1910.

§ Army Order 39, March, 1903.

|| " " 158, June, 1909.

¶ " " 392, December, 1927.

WHEELS AND TRACKS

COOPERATION OF ARMOURED CARS WITH TANKS

BY COLONEL W. D. CROFT, C.M.G., D.S.O.

THE armoured car at present is the only form of light A.F.V. of which there is definite practical experience ; it should be remembered that its fighting chamber is in most respects similar to that of a tank, together with the training of its crew and all that that implies.

By means of its road mobility it can attain a speed which will never be surpassed, and it is doubtful if it will ever be equalled, by any track vehicle.

In countries where roads are few and far between the armoured car is often called upon to move along unmetalled tracks or across country ; its great engine-power and suitable gearing enable it to do so ; and, as a result of training and suitable equipment, there are few places it cannot cross if given time. But in spite of some excellent performances, it has been proved that the four-wheeled armoured car is unsuitably designed for work across country—at first the front axle was the weak link ; as soon as that was strengthened trouble started with the rear axle. As the result of recent highly successful trials in India it has become apparent that the six-wheeler would make the ideal armoured car for that country, or for any other country, when it is remembered what a tremendous part of its movement is done on the road.

In war the road, by inviting increased mobility, becomes a powerful magnet to all arms : cavalry patrols gravitate to it like ducks to water, chancing the risk of being ambushed in order to save their horses. The guns, for the same reason, leave it at the last moment. Infantry loses 5 per cent. of its efficiency as soon as it leaves the road. Tanks will stick to a road when they have any choice, as it helps to cover up their tracks. Therefore it is reasonable to assume that a road will always be the centre of attraction for all arms.

The armoured car, by reason of its limitations, cannot be expected

to play a prominent part in the decisive issues of battle. By the time the opposing forces have closed with each other the most important part of its work should have been accomplished.

It is necessary to consider what that work is likely to be, and also how it can help its big brother the tank.

Speaking generally, the sooner armoured cars are used in a campaign the better ; and the commander who uses them to their fullest extent in the early stages will find that, unless opposed to armoured cars at least as well trained as themselves, they will undoubtedly create havoc amongst the hostile advanced troops.

In India a system of tactics, when armoured cars are acting independently, has been acquired as the result of studying the habits of the "Mugger" *—they are sometimes spoken of as "Mugger" tactics. They are : to cultivate inexhaustible patience ; invariably to hide from air and ground when halted ; to move quickly in short bounds with forethought about the next halt ; when possible to make long moves by night ; and to strike only when certain to kill.

The above is pure "Mugger." In addition surprise is the trump card of armoured-car combat, just as it is of any other combat. The creation of an ambush is an art in which much training is necessary ; obviously the enclosure of a steel envelope which hides all involuntary movement on the part of the *personnel* greatly increases the chances of success. The armoured car can be used with great effect at night, for its searchlight can illuminate the immediate neighbourhood as well as the machine-gun sight, the combination producing the most accurate results up to 300 yards.

If it is necessary to move by day in the presence of hostile aircraft, it has been proved (even in a dusty country like India) to be possible to move unobserved from the air if the manœuvres of hostile aircraft are carefully studied.

From the start of a campaign the commander of a force must be eaten up with curiosity about the doings of the enemy. His air scouts may be able to tell him much ; but even under the most favourable flying conditions ground troops are essential. The most mobile ground troops for getting and keeping touch with the enemy are armoured cars.

Their preliminary rôle might well be employment as complete units far in advance of the bulk of the force, in constant touch with the enemy ; hampering his movements, obtaining identifications giving him cause for constant anxiety about his flanks ; and

* Crocodile.

endeavouring by every means in their power to win that initial advantage for their side—sowing the seed of demoralization.

This method of employment might necessitate moving distances to be reckoned in hundreds of miles, the greater, and safer, part of the movement being carried out on a metalled road, since, in the early part of a campaign, there is little likelihood of encountering an enemy who cannot be lightly brushed aside.

Practically, in whatever part of the world a reconnaissance of this kind takes place, it is safe to assume that there will always be a road of sorts ; obviously, then, it is of great importance that whatever the future design of armoured cars is likely to be, the wheel, multiple for choice, should predominate.

It is now necessary to consider how armoured cars and tanks can cooperate in this preliminary stage. It is safe to assume that tanks will move at night from cover to cover, the selection of these lying-up places being the duty of tank reconnaissance officers, who must be able to supply units with all available information about the places selected, the means of getting to them, and how to cover up tracks on arrival. The best means of doing this is for the tank reconnaissance officers to accompany armoured-car units in order personally to reconnoitre places selected by the map, the armoured cars acting as escort.

Later on, by making use of armoured cars on reconnaissance, it may be possible for the tank commander to obtain a fairly accurate idea of the area in which his tanks may be called upon to operate : for by this means tank reconnaissance officers can obtain information of great value. Even if a good deal of the reconnaissance is wasted, they could cover such a large area that they are bound to get some information of value—e.g. the map shows a stream as a blue streak which may look perfectly harmless, but which on investigation by means of reconnaissance discloses the fact that it has a muddy bottom and bad approaches, and that it is only fordable at some particular spot. Again, a wood which looks formidable on the map is found to be honeycombed with rides ; but just within its borders is a bad tank trap consisting of a *nalah* * with impassable sides.

Obviously it is vital for a successful tank operation that all ground should be reconnoitred ; unless this is done in open warfare by means of armoured cars, it is quite safe to say that it never will be done. Therefore, since the end to be attained justifies the means, it is certain that sending armoured cars forward for this reason alone is more than justified.

* Watercourse.

Later on, when the hostile forces are at handgrips, the armoured cars must be withdrawn. At this stage the force commander, in addition to detailing them to watch his flanks, would be well advised to use them to watch for the final tank punch. Here again the tank commander could give the armoured-car commander an indication of the locality and method of the tank attack, so as to ensure that the latter gets a flying start in the event either of victory or of defeat.

In the case of success it is essential that the staffs of the light and heavy craft should be working together so as to ensure cooperation between the two if, and when, the break-through on the part of the tanks is accomplished. The tendency would be for the armoured cars to do this on the flanks; but it is certain that they would be expected there, and that steps would be taken to deal with them; whereas, if they could follow the tanks through the actual gap created by the tanks, their chances of "fanning out" for eventual pursuit would be immeasurably increased.

Six-wheelers could do this always owing to their independence of metalled roads.

If tanks are attacking from a flank, the leverage of this flank attack would be substantially increased by means of armoured cars operating wide on the flank, on the outside edge of it.

But whether in victory or in defeat the rôle of the light craft is clear. In victory it is unremitting pursuit over ground already reconnoitred with that object in view; and it is then that the closest touch between the staffs of the heavy and light craft is so essential, in order that even the most temporary check sustained by the latter may be frustrated by the prompt intervention of the former.

In defeat the armoured cars must be prepared to sacrifice themselves to help the tanks away by adopting "Mugger" tactics; and, if necessary, they must assist in tank destruction and in the rescue of the crews.

Armoured cars are the complement of tanks; both should be represented in any force of all arms for this reason alone. The ideal cooperation will be attained only when both types of these weapon carriers are under the control of one commander.



THE RENUNCIATION OF WAR

BY MAJOR-GENERAL SIR W. D. BIRD, K.B.E., C.B., C.M.G., D.S.O.

LIFE, and all its activities, is for many human beings largely an experiment, for they are continually trying to find ways of living more fully, of obtaining more sensuous value from life. It is evident, therefore, that, from this point of view, the removal of war, which involves the destruction both of life and of its amenities, will be highly desirable, leaving out of question the strong ethical and spiritual objections to such a system of conflict. And any measure, any experiment such as the "utterance of a phrase to resolve out of existence many psychological difficulties," that is likely to assist in ending war cannot fail, therefore, to be welcome to mankind. On the other hand, it is not unreasonable that, while welcoming every project for the removal of war from among the phenomena of life, we should attempt to look at each one, not "as a stamping ground for the sceptic," but from every possible standpoint.

As is well known, many ways have already been tried, or suggested, of preventing war. There has, for instance, been the method of alliances, of gaining in this manner such strength that others will hesitate to test it. But the method has failed because strength tempts men to domineer, and there is in consequence often a disposition for one partner in the alliance to presume on its force and to run the risk of war. There has been the balance of power with its resulting armaments, which tend to become so intolerable that war may be sought as a relief from them. There is the League of Nations, a kind of universal alliance, the members of which undertake to maintain peace by respecting and preserving, as against external aggression, their territorial integrity and existing political independence; that is, they agree to maintain by force the existing state of affairs unless it is altered by consent. Disarmament, or partial disarmament, has also been suggested, apparently on the ground that the sight of means to do ill deeds makes deeds ill done; but to obtain agreement on this subject seems to be very difficult.

About the middle of April, 1928, a new proposal was made for preventing war, when the Government of the United States of America submitted to the Governments of France, of Great Britain and her partners, of Germany, Italy and Japan, the draft of a treaty—it has now been signed by the representatives of 15 states, and others are preparing to do the same—which the United States were prepared to sign with these Governments and also with any other Governments similarly disposed. And in the Treaty it was laid down that “The High Contracting Parties . . . condemn recourse to war for the solution of international controversies and renounce it as an instrument of policy in their relations with one another.” Also that the High Contracting Parties agree that, “the settlement or solution of all disputes or conflicts of whatever nature or of whatever origin they may be which may arise among them shall never be sought except by peaceful means.” Subsequently, it was explained that, since defence is an inalienable attribute of sovereignty, it can neither be reinforced by mention in a treaty nor impoverished by omission from it; that although the Covenant of the League of Nations can be construed as “authorizing war in certain circumstances” it gives “authorization and not positive requirements”; and that, “as a matter of law, violation of the Treaty by one party would release the others from their obligation to the treaty-breaking State.”

The vital element in these proposals is that war is apparently to be renounced altogether as an instrument of policy, for, if it is renounced as between powerful States, it is surely reasonable to suppose that it is to be renounced by them in their relations with the less powerful nations; even with peoples who have no stable governments, and in dealing with these in crises no better method than force has, it is said, yet been discovered. The question arises, therefore, what is meant by the word policy? Policy, as it seems, is in this sense the expression used to define the mutual relations between each other of States; and policy, therefore, may either imply cooperation, or aggression and interference, or defence and resistance. Since defence is an inalienable attribute of nationhood, and since the signature of the Treaty will be an act of cooperation, only the aggressive, interfering, element is apparently forbidden.

The next question is whether interference is always bad? It has for long ages been the privilege of the strong either to repair wrong by force or forcibly to take up the cause of the weak and oppressed, a privilege that will apparently no longer hold. If, then, an outcry against atrocities, like those in 1876 in Bulgaria, is raised,

only moral pressure can be used to end them. It may, of course, be argued that no modern State will be so depraved as to tolerate atrocities, although recent events do not encourage this belief. It may also be urged that moral is actually more powerful than physical force, although this is doubtful as regards people who commit such crimes. It is, on the other hand, possible that the day has already passed when States were prepared to fight about such questions. Admitting the strength of these arguments, it seems nevertheless that the definite knowledge that war will not follow on atrocities, as apparently will be the case, may tend to reduce any hesitation that may have existed to indulge in them. Further, it may in this connection be asked whether the Great Powers are now precluded from interfering with the object of putting an end to a civil war that has arisen, and is dragging out a long course, because a change of government in some minor State is desired by one side and resisted by the other? and if so will not the cause of peace suffer? Also whether such actions as the recent dispatch of British troops to Shanghai, and of Japanese troops to Shantung, are defensive, the inalienable right of every State, or interfering? Some Chinese, it may be remembered, did raise protests against the so-called aggressiveness of these measures.

War, as every one knows, has its bad, its brutal, side, but there is also this soul of goodness in war that its horrors on the one hand, and doubts as to its issue on the other, have seemingly been a deterrent against harsh, unjust, domineering action in international relations, just as the physical consequences that may follow on such action have often prevented it in ordinary life. In other words, fear has hindered violence. Lord Grey has certainly pointed out that "fear causes suspicion and hatred; it is hardly too much to say," he adds, "that it stimulates all that is bad and depresses all that is good." But so far as fear has prevented war it was surely advantageous. And if the fear of war is to be removed, and the solution of all disputes sought by pacific means, fear will no longer be a deterrent, and there will be no bar, except the moral pressure already referred to, against the continual raising of the many thorny questions that are now half dormant. Delicate questions, for example, of frontiers, of the right to immigrate (which is claimed by the Americans to be "a purely domestic, national, question"), of tariffs. And if these questions are raised, may not the friction consequent on doing so produce an irritation similar to that resulting from bloated armaments? which, it is said, did lead to war.

There is yet another point. What is sauce for the Great Powers

will, it may be supposed, also be claimed as sauce for their Dependencies, Protectorates, etc. ; and there is only one of the six Powers which were first asked to sign the pledge to renounce war, and therefore force, that does not govern or supervise one or more alien races. Unless, then, these Powers are prepared to settle by pacific means all differences between them and those under their protection, it will be concluded that there is one law for the mutual relations of the strong, another for those between the strong and weak. Further, may not the fact that such a Treaty has been signed induce these races, whose brains are their principal weapons, to press for the realization of any wishes they may cherish, and to make demands, which may be refused, that the solution shall be sought by pacific means ? And may not this in fact end in resort to force, and in the bitter wars of peace ?

There is, however, also the other point of view that the signature of this Treaty may be the prelude of the new era in human intercourse, of the great readjustment of the relations of mankind, which sooner or later will be tried ; and one cannot but hope that this may be the case. Meanwhile, is there not a possibility that the attempt to get rid by radical treatment of one set of the causes of war may raise a crop of equally dangerous problems, which must be met and solved before men settle down to enjoy peace ?

It is said that Cromwell once exclaimed, " though peace be made, yet it's interest that keeps peace." And perhaps Cromwell was right, and peace will only come and stay when every one realizes that this is to his interest.

A RECRUITING MARCH THROUGH SUFFOLK

BY LIEUT.-COLONEL W. N. NICHOLSON, C.M.G., D.S.O.

LINE regiments very rarely visit their counties on recruiting marches. There are several reasons why they do not. They are not often in the neighbourhood of their own territorial districts, and any train journey is prohibitive on the score of expense. They cannot make a march unless they are invited. They cannot accept an invitation unless they are permitted. Recruiting marches do not produce immediate recruits, and therefore permission is not readily granted.

Recruits may not flock to the Colours as the regiment marches from village to village, but the march is invaluable, as this article hopes to show.

There is nothing new about a recruiting march. Falstaff "pricked" recruits in Gloucestershire at Justice Shallow's house for Henry IV's war against the Percys. Since his day the annals of every regiment show how detachments were billeted in various parts of the county, engaged in collecting recruits. But with the growth of the Territorial System recruiting detachments were no longer required, county connections were formed, and a regular supply of recruits was guaranteed.

Times have changed. The present recruiting system, excellent in every other way, is inclined to cut across territorial connections. Although the county regiment has a prime place in the affections of the county to-day, its ranks are no longer filled with county men.

In August, 1927, the 1st Battalion Suffolk Regiment made a county march—by invitation and with permission. The County offered a welcome to the Battalion after seventeen years of foreign service. The War Office approved it as a recruiting march. The march was made from Colchester by Stratford St. Mary, Ipswich, Stowmarket, Bury St. Edmunds and Sudbury, a distance of eighty-three miles; and eight days, including two days' halt, were spent making this circuit.

At Ipswich the Battalion was received at the Town Hall by the Mayor, who gave an address of welcome. That afternoon the Colour

was trooped in Christchurch Park before a large crowd. Next day the whole Battalion attended a luncheon in the Town Hall, at which the Mayor presided. In the afternoon sports and a gymnastic display attracted a great many spectators.

The following day the Battalion reached Stowmarket, where a presentation from the County to the Battalion was made by the Lord Lieutenant, Sir Courtenay Warner. The County's gift consisted of ten flutes and two new Colour belts, decorated with the regimental battle honours. Afterwards the Battalion was entertained to tea.

Two days were spent at Bury St. Edmunds, where a similar programme had been arranged. The Battalion with its Colours attended Divine Service at St. Mary's, where the Chaplain-General preached the sermon. After the service there was a reception to the Battalion on Abbey Hill. It was estimated that about ten thousand people came in from town and the neighbouring country to witness the Trooping of the Colour that afternoon.

A seventeen-miles march brought the Battalion to Sudbury, the last place of importance to be visited. Here a cricket match and gymnastic display attracted large crowds; the men were again entertained to tea.

An untried battalion of very young soldiers had marched out from Colchester; a battalion of seasoned men, imbued with all the regimental traditions, marched the last eighteen miles back into their barracks. Recruits had not materialized, but the county had learnt far more about life in the Army than the most vivid posters could show; and the finest stimulant had been given to future recruiting throughout the whole district.

The Territorial System has been the basis of recruiting for our line regiments. It has been possible to gauge the particular qualities of regiments by knowing where they come from. The last war tested and proved these qualities. To-day the case is changing. County regiments such as East Anglian regiments, which in pre-war days had at least 90 per cent. of their men from their Territorial districts, now have less than 50 per cent. This change is due to the present system of recruiting, by which a portion of the recruits are pooled and depôts are filled as required.

The advantages of this new system in training and drafting are obvious. The disadvantages are not so certain. Some will argue that an admixture of men from all parts of the British Isles is desirable; that the blend of townsmen and countrymen is essential; that a cockney in an agricultural regiment is an educational factor of great value; that Irish fire and English steadiness should go

shoulder to shoulder. They will say that the general standard of intelligence is raised by this system of drafting, and there is much truth in this assertion.

But the problematical gain in intelligence is balanced by a falling off in the number of recruits, and perhaps by a weakened *esprit de corps*. The county tradition and the interest of the county in its regiment slackens when the men who compose it are no longer county men.

Recruiting is affected to a certain extent by the present system. In Suffolk, for example, a recruit who can prove a family claim or any other sound reason to join the county regiment is invariably allowed to do so, even though recruits may not at the time be required for the regiment. In cases where a recruit's wishes as to the county regiment cannot be met for any reason, he is given the choice of joining some other regiment, and he usually decides to do so rather than to wait until such time as recruiting is reopened for the Suffolk Regiment. Recruiting in the county suffers in this way, because a Suffolk man will never influence other men in his county to enlist in another regiment in the same way as he would have done had he joined his own regiment. In the old days, when some 90 per cent. of the men came from the county, there were plenty of inducements to would-be recruits. The Suffolk lad had many friends and relations serving. He knew the life he was going to join ; in many cases the officers came from his part of the county, and the non-commissioned officers were related to him. There were the closest family ties and friendships to stimulate recruiting. The old soldier when he left the Colours was the best of recruiters for his own county regiment.

A county march is a call to recruits for the county regiment ; the people of a county learn a great deal about the soldiers' life in the county regiment ; no newspaper article, poster or recruiting sergeant can tell them half so much as the sight of a regiment on the march, or in its billets at night.

Generally speaking, people in the country districts are ignorant about life in the Army. The countryside is far from the garrison town. The old tradition of the Army as being composed of brutal and licentious soldiery is still remembered. Many mothers living in distant villages say openly that they would rather see their sons dead than enlisted as soldiers. Many still believe that the walls round barracks are there to keep the population safe from the drunken soldiers.

But the brave music of the distant drum brings every one to his

door. Young soldiers singing as they march convert every waverer, and the tales of their exemplary behaviour in camp and town spread far and wide.

For the modern soldier is the most law-abiding citizen in the Empire, just as he is the greatest peacemaker abroad. His kindness, his humour, his friendly manners with all classes have won him the highest praise in every foreign land to which his country has sent him. His merits are better recognized by foreigners than in his own country; for his own people do not yet realize that his conduct in peace is as valuable as it is in war.

It is in this respect that a county march has more than regimental importance; it is of political value. There are many pacifists in England. No one in England wants another war; but there are many who would abolish the Army in the hopes that by so doing they would make war impossible. These people compare our Army with the German pre-war Army, and argue that with the instrument ready to hand the temptation to use it becomes too great. They feel that the existence of an Army engenders war. But the population in any neighbourhood where the anti-militant element is strong will take a different view of the case when they have been visited by their county regiment. As well abolish the police as the modern British soldier; for the soldier is but the Empire's policeman. There is nothing provocative about the British soldier when you know him.

A recruiting march to-day is a very different business from a recruiting march a century ago. The Army to-day offers far more than it did. Education, promotion, civil employment are all paraded and preached during a recruiting march. The Army offers a real career to any who join its ranks. There is an extended education awaiting the soldier when he joins, an Army university training the object of which is to turn the soldier into a true citizen. There is a chance for every one to get a Commission from the ranks, and a career for the man who does so. While for any man who makes the Army but a temporary career, a training in civilian work is available before he returns to civil life. All this may be well enough known in garrison towns, but far too little is known of it in the country districts. In a county march, where the regiment is officially welcomed in every village and town it visits, ample opportunities exist for spreading this information.

A modern Army needs real volunteers, young men of education and ambition. There are plenty to be had, men of character with a taste for adventure. The Army offers the best of careers for such;

but the Army does not advertise itself in the right way—by showing itself to the country.

In the forefront of our regimental teaching comes *esprit de corps*. We foster the regimental tradition in work and games. Every one is taught regimental history. But how much of it soaks in? Men do not listen closely to twice-told tales; they get but a shadow of the story. Tradition centres round the regimental Colours; but how often does the soldier see them? Never on active service. Great facts in history are widely spaced by intervening years; moments of national exultation are even rarer. Very few partake in a victorious march into a conquered land.

A county march is the finest teacher of the glories of the past, and of the possibilities of the future. A battalion for once is a live unit. There are flags on all the cottages and crowds in every town. The Colours are on parade, the centre of the picture, the cynosure of all eyes. Whatever may have been the reason for his enlisting, a soldier has no doubt on such a march as this about the joy of soldiering. In his mind it has no resemblance to the marching and counter-marching in his garrison town or in the manœuvre area. There has been a crowd to wave its good wishes in every village through which he has marched; and in the town where he halts for the night he has been received with a civic welcome. In his home town the battalion marches on to the town square with band playing and Colours flying, forms up opposite to Town Hall and is received by the Mayor in his robes. An address of welcome is read and there are many references to the glories of the regiments in the past. Then follows a tea to the whole battalion, ending with more speeches—more history, more praise of the regiment. Apparently all these civilians know his regimental history better than he knows it himself, thinks the soldier. They know what has been done in the past and are proud of the regiment to which he belongs. The man in the ranks listens and learns; after the third day's march he has learnt what he will never forget. The past history has become his tradition to be lived up to in the future. The civic receptions teach him the tradition to which he is heir, while the welcome which is extended to him by high and low alike touch the British soldier where he is most susceptible, and thus another link is riveted in his regimental consciousness.

Before he has proceeded far on a county march the soldier feels that he belongs to a great regiment. The regimental traditions learnt on such a march will last a regiment for thirty years or more. There is no finer propaganda, no greater stimulant to recruiting, no

better answer to those who would abolish the Army than this very intimate inspection.

No one welcomes a county march more enthusiastically than the old soldier who has left the Colours. No regiment forgets its old soldiers, for it is they who have made its history and are its best recruiters. A county march brings home to the county the slogan "once in the regiment always in the regiment." Old Comrades Associations do their best to promulgate this, but it needs a county march to blaze the facts that in the Army the old soldier is not forgotten.

Reunions of old soldiers are expensive affairs. Comparatively few of the thousands of old soldiers have sufficient spare cash to bring them in from neighbouring villages to meetings at the central town, many have not money to pay for their share of the entertainment. But during the county march of the 1st Battalion of the Suffolk Regiment by the generosity of each town the entertainment which was given to the serving soldiers was extended to many ex-soldiers, and old friends were able to meet and live once again in thought the incomparably fine Army life.

Marching round the county has other values besides recruiting. It affords the most admirable training. Marching and march discipline are the corner-stones of the infantry soldier's life. A march for seven consecutive days will teach him far more about the fit of his boots and his socks than the longest route march which starts and ends at his barrack gate. Seven days will give him plenty of time to think of the most economical load on his back and how it can be best carried. Road space, hourly halts and timing generally will become habits. Moreover, the cooks and employed men will get the march of their lives. They may avoid the monthly outing thanks to their cunning, but they cannot be absent from this. A battalion that has marched round the county can compete in the marching arena with any unit.

The value of an infantry unit may depend on its marching powers; but its comfort turns on its knowledge of camp life. Standing camps in a manœuvre area with its occasional night out will not teach half as much as a different camp each night. The cooks may be somewhat at fault at first, but their shortcomings will be speedily pointed out to them by high and low alike. Tents may take a long time pitching the first night, and there may be one or two loose horses, but everything will be at concert pitch before the battalion returns. For however well men may be taught in and about barracks, it needs practice to make perfect.

On a march of this nature a battalion cannot very well manœuvre across country unless the country is peculiarly suitable. But there is no difficulty in taking a proportion of the officers and men ahead by bus, and then conducting an exercise on the ground without troops. There is none of the staleness of known country, as must be the case in the neighbourhood of a garrison town. It is all new ; there is a great opportunity of teaching an eye for country and rapid decision. Lessons learnt are not forgotten quickly, for the circumstances are so memorable.

How much does all this cost ? It is a natural question. It is the chief consideration of the county authorities before an invitation is given ; it is the first thought of the War Office before approval ; and it is the chief anxiety of a battalion from the time the estimate is made till the bills are presented. The cost of this march into Suffolk was in the region of fifty pounds. It is doubtful if any fifty pounds was better spent in the whole of the Army Estimates.

In the Army we are too apt to follow the beaten path of custom. Financial regulations are the principal bogies ; they hedge in the path and they are responsible for the long row of notices of " Trespassers Beware." All sorts of penalties await the soldier who has not got an acute financial sense, penalties which he pays for from his youth upwards. No wonder he looks askance at a recruiting march, for expense is his *bête noire*.

This fear is not confined to the soldier. The town authorities place this consideration first in importance. The suggestion that their county regiment should be welcomed suggests beer, unlimited beer. Unlimited beer which they imagine must mean unlimited drunkenness. When they learn to their surprise that beer is out of fashion, they fall back on some more solid refreshment such as tea or luncheon. This, they realize, means even more money than simple beer. A county march suggests a county presentation, silver drums and the like. All very unnecessary extravagances in these times of national economy, they very rightly consider. They have no experience to go on and are most unwilling to make expensive experiments.

These difficulties should not prevent a county march. No regiment wants to march round its county in order to be entertained. Its object is a friendly visit, nothing official. A cricket match or sports, the band playing in the public park, the drums beating retreat, a gymnastic display or a big parade to troop the Colour. If the town wishes to provide a tea to the battalion, so much the better ; the battalion will be most grateful. In the march round

Suffolk the county people were most hospitable. I have no knowledge of the expense incurred by the towns which we visited ; but I am quite sure that they would unhesitatingly welcome the regiment at any time in the future. I believe they would whole-heartedly recommend their neighbouring counties to follow their example.

All who had experience of this march pronounced it an unqualified success. Its effect was immediate, so different from the gradual change that results from change of station and change of command. The effect was due to environment, and the effect will be lasting. Any regiment that visits its county will get the same benefit. But the best time for a county march is undoubtedly within two years of returning from foreign service. Then a battalion will be largely composed of young soldiers, for the older men will have been transferred to the foreign battalion. It is the most impressionable time for a battalion, the time when lessons learnt will be longest remembered. Regimental tradition will be at its weakest, but will be capable of receiving the greatest stimulant.

ADJUTANTS T.A.

BY COLONEL H. I. POWELL EDWARDS

THE writer was recently shown a letter addressed to a Territorial adjutant who had appealed to the War Office to rescue him from the clutches of the Board of Inland Revenue, which had charged him income tax on his lodging and furniture allowances.

The appeal resulted only in a statement that the War Office could not recommend that the officer be made an exception to the income duty regulations. But the cruellest cut in the letter was a reminder to the officer that, although he was not eligible for medical attendance from Army sources, he was granted an allowance of $3\frac{1}{2}d.$ a week in aid of medical attendance : a rapid calculation will show that in the minds of High Authority the risk of illness to a Territorial adjutant is met by a grant for medical attendance of $15s. 2d.$ per annum. If this calculation is arrived at by any process under the law of averages a Territorial adjutant must indeed be what our insurance friends call a "good life."

The cheapest, and not the least efficient, dentist the writer ever met did indeed remove two teeth for him for an inclusive charge of $5s.$ But this was in the wilds of the Free State, and charges nearer home are usually high enough to make more than one visit to the dentist by one member of his family more than the authorities will allow to a Territorial adjutant in the space of each twelve months.

In fact, a Territorial adjutant has no business to consult a dentist or a doctor more than once a year ; if he does he can very well pay for the luxury himself.

So, apparently, says "Finance."

This is all very fine for Finance. But what about the Territorial Army ?

We want the best men as adjutants. Some of the best are not superlatively well off.

And what do we offer a Territorial adjutant to induce him to come and help us ?

We offer him an " appointment carrying a fixed tenure," which means that, so long as he gives satisfaction, he is secure of remaining in one and the same place for about four years—but he must pay income tax on his allowances !

" What a godsend ! " says the married man with a family, after having been left once or twice with two houses, one of which he does not want and cannot get rid of, after a surprise move of his Regular unit to a new station.

We offer him a post in which he will have more freedom and more responsibility than most Regular adjutants and be considerably more his own master.

" That's the thing for me ! " says the young and energetic soldier who wants a show of his own.

So far, then, we are attracting the married man who wants a little peace and quiet for his home life and the younger officer who wants a responsible post.

It is well to remember at once that the latter may, if he is good enough, be in the running for the adjutancy of his Regular unit, while the former will want to be satisfied that he is not going to lose on the swings of expenses what he gains on the roundabouts of security of domicile.

How, then, does the lot of a T.A. adjutant compare with that of the Regular officer serving with the Regular Army ? From the point of view of remuneration for extra responsibility and extra work, the Regular adjutant draws 5s. per day as extra duty pay. The Territorial adjutant draws 2s. 6d. Why this difference ? We want the best men. Why do we pay them at half rates ? Is it because their responsibility is less or because their work is less ?

So far as responsibility is concerned, all that can be said is that that of the Regular soldier is to maintain at a high pitch of efficiency a unit which he takes over efficient, while that of the Territorial adjutant is to maintain the numbers and morale of a unit and such a state of efficiency as can be converted to fitness for battle within a few months. The Regular works on men under military law and strict discipline, while the Territorial works under conditions which involve not merely ability as a professional soldier, but the exercise of tact and discretion as well.

There is little difference in the degree of responsibility attaching to the work of a Regular and a Territorial adjutant respectively. A Regular adjutant has admittedly a whole-time job. But those

who think that a Territorial adjutant has not are certainly not correct in all cases, and it is doubtful if they are correct in any.

Conditions differ very greatly. For instance, some R.A. units of the Territorial Army are completely under one roof, some have two or more drill halls close together. But some of the "converted" Yeomanry brigades are located in may be a dozen or more places scattered over two counties. In such cases the adjutant, when not in his office, is travelling to or from duty.

In almost all cases the principal hours for training are from 7 p.m. till 10 p.m. in the winter, and numerous week-ends are spent in work.

Dispersion of units is necessarily the rule in country as contrasted with town units, and this entails much more travelling; while the concentrated town units entail more attendance at the one or two centres.

Whatever view be taken as to the relative burdens of responsibility and work, it is submitted that the difference between 2s. 6d. and 5s. a day is unwarranted and a direct discouragement to good men to apply for adjutancies in the Territorial Army.

But the difference in pay is only one of the points on which the Territorial adjutant comes off second best. The Regular is allowed a horse, forage, a groom and a servant, for all of which the State pays.

The Territorial adjutant has none of these things, and the absence of a horse in particular is a great deterrent to many good officers who are posted to country units.

It is by no means a bad thing for adjutants of country units to be known in the hunting field, and there ought to be opportunity in many districts for such officers to be allowed to keep a horse at the local barracks.

As regards servants, a Territorial adjutant is allowed 2s. per day or 14s. per week in lieu of the groom and servant of the Regular soldier. Such an allowance is laughable compared with the expense of even one man in wages and keep in civil conditions.

Again, a Territorial adjutant must live somewhere, and must incur considerable expense either in travelling to and from his office or in rent, and very possibly both. No "quarters" are available for him.

Thus, whether married or unmarried, there is no doubt that in terms of money, a Territorial adjutant is not nearly so well off as an adjutant in the Regular Army. An adjutant's wife is also worthy of some consideration—at all events, it is likely that if her point of view is totally ignored the Territorial Army will not benefit. And

from her point of view the present state of things not only means extra expense in rent and servants, but also a very large number of solitary evenings and week-ends. No doubt if she is worth her salt these things can be tolerated if they mean that her other half is happy and feels that he is making good.

This brings the writer to his last point, which is, that it has not, so far as he knows, yet been made perfectly clear that to have held a Territorial adjutancy is definitely a point in favour of any soldier when his career is being considered from a purely professional point of view. On the contrary, the writer has heard it suggested that this is not the case, and that a Territorial adjutancy leads an officer nowhere except possibly to oblivion.

The Territorial Army is now being constantly reminded that it, and it alone, stands behind the Regular Army. The Territorial Army in discipline and in its view-point is a "citizen," not a "professional" army. It contains the finest material in the country, but, if the best is to be got out of it, its potential leaders and staff officers in war should have some knowledge of its special characteristics. Some glaring errors were made in the course of the Great War which should never have been made. They resulted in "friction"—the *bête noire* of every good staff officer.

Surely, therefore, it should be clearly understood that, professionally, a Territorial adjutancy is a post to be sought for, a post which, even if financially unattractive, may in other respects pay for the taking.

At the present time, it is extremely doubtful whether these posts make any appeal to the best officers in the Regular Army, and it is certain that many who accept them are disillusioned later on, at any rate, from the financial point of view.

No doubt this is not the time to ask for money to be spent on the Army. It is always our custom to starve the Army in time of peace, especially after a great war. But at least the Territorial adjutant should not be charged income tax on his "allowances," which are merely a form of compensation for non-monetary emoluments to which, as a Regular, he is entitled, but which, as a Territorial, he fails to obtain.

As a compensation they are, even in terms of money, quite inadequate. To treat them as income and to tax them is less than justice, even to the holder of an "appointment carrying a fixed tenure."

An alteration in this matter would involve no increase in the Army Vote and would at least remove a rankling injustice.

The definite recognition that serving as a Territorial adjutant was, professionally, an asset would likewise cost no money.

It seems not impossible that such service might be made a matter for consideration in posting to staffs of the expanded Army during a war, or even in considering the claims of candidates for the Staff College in time of peace.

In conclusion, the writer desires to make it clear that the point of this article is not that we are not getting good men as adjutants in the Territorial Army, but that they are not being fairly treated in comparison with Regular adjutants.

If this goes on it is contrary to human nature to suppose that we shall continue to get good men, unless they are compelled to come, and any sort of compulsion would be as unfair as it would be unworkable.

The adjutants and the permanent staff instructors of the Territorial Army are its backbone. They cannot air their own grievances, and this is the reason why the writer has ventured to point out a few instances of the kind of way in which it appears to him that good men are being hardly treated.

UNCENSORED, 1914

EXTRACTS FROM THE DIARY OF MR. Y—— Z——, THE FAMOUS
WAR CORRESPONDENT

8th of August.—They say that our Army is going to France to cooperate with the French, but the plan is kept secret. Even my Paper knows nothing, despite the tremendous power of the Press. Every day, now, I interview at least one cabinet minister in an endeavour to obtain permission to accompany the troops. Preparations for war are important, but nothing is more important than to let the people know everything.

13th of August.—I have been given permission to embark for the front. The Government has not told me its plans. I have studied the map and cannot believe that we shall do any good by going to France. Every one seems to have forgotten that we have command of the sea, which makes possible a landing in the Baltic. From Swinemünde it is a short march into the heart of Germany.

18th of August.—I arrived at Amiens to-day and called at G.H.Q., where every one seemed very busy and disinclined to talk. I had to introduce myself to the Commander-in-Chief, who was in good spirits. On saying farewell, I ventured to remark, "Field-Marshal, you've no business here. Trying to help the French with your little Army can only result in heavy losses, and where are your reinforcements to come from? You should have been sent to the Baltic. Swinemünde is Germany's vulnerable spot. I know it's not your fault—but you ought not to be here."

19th of August.—I saw the censor at G.H.Q. to-day. He was quite friendly, but I am by no means easy in my mind. No war correspondent likes having his despatches cut up. I wonder if my Paper approves of his appointment?

25th of August.—The retreat continues. Should I follow G.H.Q. towards St. Quentin? I wonder if the Commander-in-Chief has let them know the truth at home? The troops are very tired and I have heard grumbling. What good did we do at Mons? And now our two corps are separated from each other—a thing Napoleon would never have allowed. But, of course, we have no

business here at all. What the Germans fear is a successful landing at Swinemünde.

26th of August.—I have seen something of the fight at Le Cateau. Modern gun-fire is awful. I wish I could be present at a battle fought without artillery. My head aches continually, and one cannot be certain that most of the ammunition is not fired in waste. I know we have very little. We are retreating again. I have heard more grumbling. I was always sure that the French plan, which I suppose is also our plan, would fail.

31st of August.—I arrived at Dammartin to-day and was fortunate enough to see the Commander-in-Chief before dinner. He did not look as anxious as the situation warrants. I made bold to point out that the retreat still went on, and that he could accomplish nothing without large reinforcements. I asked him where they were to come from, and did they know at home how bad the situation was? And what of Swinemünde? I cannot say that he was as impressed as he should have been.

2nd of September.—In trying to see something of the troops in retreat—I have heard more grumblings—the worst has happened. I have lost all my kit. I believe it must be somewhere on the road between Dammartin and Melun, but no one at G.H.Q. is very helpful or thinks I shall see it again. I must return to England to refit, and to let them know the truth.

5th of September.—Arrived in London via Paris. Paris is changing: London has already changed. Very busy en route re-writing my despatches which were lost with my kit.

8th of September.—I find every one is after me for information. There is no time left me to transact my urgent private affairs. I am obliged to see all the soldiers and all the cabinet ministers, and have had to decline to give an interview to any one beneath the status of under-secretary. Even so, I have appointments at breakfast, lunch, tea, and dinner; and between times in taxicabs, Turkish baths, and night clubs—one even in a dentist's waiting-room. Several times I have prepared a detailed statement giving my views of the war and showing what ought to be done. I have reminded them all about Swinemünde, and explained its importance again and again. Every one agrees with me and says I am of tremendous assistance. My Paper is very pleased with me. I am now making my preparations to return to the front.

14th of September.—Arrived at Fère-en-Tardenois. No one at G.H.Q. seemed very pleased to see me. I told them the news from home, and asked about the passage of the Aisne which was

accomplished yesterday. I don't think it has done much good. I think this is a very difficult country for infantry. I managed to see the Commander-in-Chief for a moment, but he told me to come back later.

19th of September.—I have visited our trenches along the Aisne—very perilous and uncomfortable work. One never knows where a bullet may come from. I crawled for half an hour to escape the machine-gun fire. On the way back we had to take cover from the German shells. I stood for two hours up to my neck in a pond and then ran for it.

20th of September.—At G.H.Q. again. I believe they would be only too delighted to get rid of me. I have been asked not to create alarm and despondency among the troops when visiting the trenches. I found the son of an old friend doing duty as an artillery observation officer. He does not appear to enjoy it altogether, so I must try and find him a better job.

21st of September.—I talked with the Commander-in-Chief to-day. I think he stopped to speak to me under the impression that I was some one else. I took upon myself to observe that it was impossible for him to advance, and that the most that he and the French could hope for was to remain in their present positions along the Aisne and the Chemin des Dames. Or they might have to retreat again. I said that he had too many Germans between him and the Baltic. I thought that the Commander-in-Chief looked rather depressed. He left me hurriedly.

23rd of September.—In a conversation I had with a staff officer to-day he agreed with me that if the Danes could be induced to land at Swinemünde we could be sure of a success in the Baltic.

27th of September.—To-day I saw the Commander-in-Chief again. I still find I cannot agree with him.

28th of September.—The censor at G.H.Q. sent for me. It seems that what I write does not please him, so my despatches are not forwarded and the public at home are therefore kept in the dark as to my views. I am returning home at once to tell every one the truth.

THE IRISH FREE STATE ARMY

BY LIEUT.-COLONEL E. G. HART, late R.A. and I.A.S.C.

PART I

ON the 6th of December, 1921, the Treaty conferring dominion status on the Irish Free State was signed, and just a year later the last of the British troops marched out of Dublin. That year had been a very troublous one for the newly formed Government and its Army. That Army had its genesis in cadres of the recent Irish Republican Army, and at once found itself in conflict with other cadres of the same Army, while of course not all members of the different units took exactly the same views as to whether the Treaty with England should be loyally adhered to or denounced, and consequently there were frequent "transfers" from one force to the other. The most memorable event of that year was the fighting actually in Dublin and the seizure of the famous Four Courts, one of the capital's greatest architectural features, by the rebel forces, and its final destruction and recapture by the Government.

During the year of 1922 the strength of the newly regularized Army was about 45,000 men and 3,300 officers, organized in 65 battalions, and it remained at that strength till about the end of the next year. Since then there has been a very rapid decrease in its numbers, a decrease which is still proceeding. At present—June, 1928—the numbers are some 8,000, organized in 14 battalions of infantry, 2 batteries of artillery and other auxiliary services and arms, but it is expected to get this number down to 5,000. At the same time the wise decision has been taken to supplement it by a Reserve and Militia, which are already in process of formation, up to a strength of 30,000.

Supreme Control.—The Free State Army is technically the "Defence Force," and is under the direct control of the Minister for Defence to an extent greater than in the United Kingdom and possibly elsewhere. This control was assigned to him by the Ministers and Secretaries Act, 1924, and gives him all powers,

duties and functions connected with all the administration and business of raising, training, organization, maintenance, equipment, management, discipline, regulation and control according to law of the Defence Forces. In actual practice the Minister's office is at Central Headquarters, the old Irish Command Headquarters in Phoenix Park, so that he is in close and constant touch with the force which he controls. The Minister at present is Mr. Desmond Fitzgerald, and it has been through his very courteous, readily granted and whole-hearted assistance that I have been enabled to obtain the information necessary to write this article.

The general scheme of control and of the regulation of the Army is based on that of the British Army Act, though with certain modifications, as, for instance, in the greater powers of the Minister. The procedure of the annual budgeting and vote appears to be very similar to our own, there being twenty-six main heads, lettered from A to Z, with the numerous subheads which are the delight of audit and the despair of commanding officers. In 1922-1923 the expenditure on the Army was £7,465,000; the next year, a troubled one of civil war with the republicans, saw a rise to £11,255,000. Since then the figure has fallen steadily, so that for 1927-1928 it was £2,185,000 and for the current year it is £1,804,000. Once a member of the Dail with known sympathies for the republican party tried to censure the Government for the size and expense of the Defence Force. Mr. Cosgrave met it cleverly and wittily by the simile of a burglar objecting at a municipal council meeting to the size and expense of the police force—a thrust which went deeply home.

General Organization.—The Free State Army forms a single unit to an extent which is possibly unique in military history. The whole of its officers and men, even those of the air corps, are borne on one cadre. They all wear the same uniform, differing only in removable collar badges, and while in actual practice certain officers and men are posted to, and remain quite definitely with, the units for which they entered the Army, in principle they are liable to transfer to any other arm or branch as required. All recruits, those for the air corps included, receive the same initial three months' training at the Curragh, and no territorial distinctions of any sort are to be found in the Army.

The ranks of officers differ somewhat from those of our own Army and are a little confusing at first, inasmuch as a major corresponds to a lieutenant-colonel, and in a way is higher in rank, since he is a grade above commandant, the rank given to battalion com-

manders. The senior officers of the corps of armoured cars, artillery, engineers, air, signals and military police are all majors.

The Free State Army is divided into the following corps for the purposes of the Army Act, and these corps take precedence in the order set forth.

- (a) The Infantry Arm.
- (b) The Armoured Car Corps.
- (c) The Artillery Corps.
- (d) The Army Corps of Engineers.
- (e) The Army Air Corps.
- (f) The Army Medical Services.
- (g) The Military Police Corps.
- (h) The Army Signal Corps.
- (i) The Army Transport Corps.

It will be noted that there is no cavalry: an omission which must have cost this horse-loving people a considerable amount of heart-burning. Provision of a semi-official kind has been made for a small force of mounted infantry, but no such units are authorized officially by regulations. The precedence of corps strikes a mind accustomed to that of the British Army as curious, yet it is certainly logical to some extent.

Although field formations such as brigades and field units of some of the corps have been shown on paper and in the Army List and Directory published in 1926, actually few of these have been really organized. The Army so far has been based on its barracks, and all the arrangements of the civil war period were temporarily designed for the particular time and place. As the enemy was always still worse off, these arrangements worked sufficiently well for the purpose. Now plans for an efficient field organization are being carefully and thoroughly worked out, and they may possibly be issued before this is in print.

Army Headquarters.—As already stated, this is at the old Irish Command Headquarters, Phoenix Park. There are the three recognized branches of General Staff, Adjutant-General and Quartermaster-General. The Chief of the Staff is usually a Lieut.-General (the only one in the Army), while the Adjutant- and Quartermaster-Generals are Major-Generals. The General Staff branch is divided into two bureaus, and a detached branch under a Major-General, known as the Defence Plans Division, which is perhaps the most interesting feature of the Free State Army, and is specially dealt with further on.

The Adjutant-General's branch has the following sections :

- (1) Administration and Records ; (2) Discipline ; (3) Staff Duties ; (4) Legal ; and (5) Chaplains.

The Quartermaster-General's branch is sub-divided as follows :

- (1) Store Accountancy ; (2) Contracts and Disposals ; (3) Pay and Accounts ; and (4) Supply and Ordnance.

Defence Plans Branch of G.S.—In 1926 a military mission consisting of six officers, representing the three branches of the staff, the infantry and the artillery, and headed by Colonel (now Major-General) H. MacNeill, went to the United States of America for a year's staff training. The States were chosen in preference to England not because of the slightest feeling of hostility to us (indeed, I have not found the least trace of such feeling in the Army), but because we lack regular infantry and artillery schools such as they have in the States, and for a new Army it was felt to be imperative that instruction in such schools was needed. In one respect the choice turned out to be a very happy one. The military problems of Ireland and America are so very different that it brought home to the mission the truth that their problem would have to be worked out from the base upwards, and that no ready-made system, American or any other, would do. In consequence there is now a special staff branch, working as part of the General Staff under the title above in the buildings of the old Royal Hibernian Military School in Phoenix Park. General MacNeill is the director of the branch, which is collecting and considering all the data and schemes which have been or are being put forward, including that of its own possible evolution into a Staff, or Staff and Cadet College. Staff training is being given by means of courses to officers who attend at the branch while carrying out their ordinary duties as well, by staff rides, by map manoeuvres (i.e. war games) and by manoeuvres. The syllabus of the course is most comprehensive and thorough. These last it is not contemplated will take place more than once in every two or three years.

The organization of this branch is interesting. First there is the Planning Section, dealing with all questions and co-relating the work of the other four, which are lettered G1, G2, G3, G4, and deal respectively with *personnel*, military intelligence, training and operations, and transport and supply. That the planning of *personnel* reforms, adjustments of pay, etc., is dealt with here instead of by the A.-G.'s Branch is exceedingly interesting and would seem to be well worth adoption in other staffs. Ordinary routine work and planning can never go together : one or the other must suffer, and nearly always it is the planning, since if the routine work be not

done there is usually immediate and concrete trouble, whereas it is only one's conscience which reproves a dereliction of duty as regards planning.

Each one of these sections has in it an officer representative of each of the other sections, so as to ensure there being no watertight compartments, and that even while a problem is being sectionally considered it shall not lose sight of the fact that other sections are also concerned.

General MacNeill's branch is, in fact, the research and experimental laboratory of the Free State Army, and just as all the largest and most progressive commercial concerns in the world have found that such branches are absolutely essential to their well-being, so no doubt the Free State will find that the money which it has spent on this part of its Army will give the best return.

Administration.—Originally the country was divided into three Commands, the Eastern (headquarters Dublin), the Southern (Cork), the Western (Athlone), and the Curragh Training Camp, and within the commands were (July, 1926) eight brigades based on Ballyshannon, Athlone, Cork, Limerick, Kilkenny, two on Dublin, north and south, and the Curragh. On the abolition of the Commands in June, 1927, the brigades became the seven districts of Athlone (this took in the first two brigades noted above), Cork, Limerick, Kilkenny, Dublin North, Dublin South and the Curragh. In May of this year the Kilkenny district was merged in that of the Curragh, though a part of its area may possibly be given to Cork, so that now there are six districts, while for the time being the brigade has disappeared. Except the Curragh, districts are commanded by colonels with staffs of adjutants, quartermasters, staff officers, pay, medical, dental, transport, provost officers and chaplains. The areas of these districts and the infantry battalions stationed in each are as below. The other units are not given, as these details have been given under their own headings :

Athlone.—The countries of Donegal, Mayo, Sligo, Leitrim, Roscommon, Longford, West Meath and King's (now called Offally), 3rd and 4th Battalions.

Cork.—Cork, and possibly Waterford may be added, 2nd Battalion.

Limerick.—Galway, Clare, Limerick, Kerry, 10th Battalion.

Dublin North.—Dublin north of the Liffey, Meath, Louth, Cavan, Monaghan, 6th, 9th and 14th Battalions.

Dublin South.—Dublin south of the Liffey, Wicklow, 11th and 13th Battalions.

Curragh.—Kildare, Queen's (now Leix), Carlow, Kilkenny, Wexford, Tipperary, and possibly Waterford if not given to Cork, 5th, 7th, 8th and 12th Battalions.

The Infantry Arm.—The fourteen battalions of infantry are numbered and known as the 1st, 7th, etc., Battalions. There is no territorial system of any kind at present for the regular battalions. The present battalions have nearly all changed their designations on the reduction of former units, so that the identity of those which fought in the troubles of 1922–1923 is hard to trace. As explained later under uniforms, all battalions are dressed alike save for the battalion badge. In view of the practical breakdown of our own territorial system during the Great War, when men from all over the kingdom were found fighting in every regiment, the decision of the Free State not to adopt such a system is probably wise.

The peace strength of a battalion is 22 officers and 446 men. On mobilization the latter number would be raised to 668 from the Reserve. Each battalion is composed of three rifle companies and one machine-gun company, with a headquarter company for staff, clerks, tradesmen, etc. Rifle companies have a strength of 4 officers and 117 other ranks, there being two platoons of two sections and four squads each.* Squads consist of 10 men and a corporal, and sergeants command the sections. The company staff consists of a company sergeant (equivalent to our colour-sergeant), a company quartermaster-sergeant, an orderly-room clerk, a bugler and 3 cooks. A captain commands a company and has a lieutenant and second lieutenant under him for the two platoons.

The machine-gun company has not yet been provided with a definite establishment other than that for rifle companies, nor is it finally decided how its eight heavy Vickers machine guns shall be carried. The battalions at the Curragh are using S.A.A. wagons, but pack-horses may possibly be used instead.

Battalions are commanded by commandants, the rank next above that of captain as already noted, and the senior captain is the second in command, but there is no such definite appointment. On the other hand, both the adjutant and the quartermaster, who are captains, have subaltern assistants and there is a staff officer in addition. The proportion of officers to men is one of the criticisms which have been brought against the Free State Army by the opposition in the Dail, but in such a small Army designed as a nucleus the proportion should of course be even heavier.

In a note in the Army List of 1926, already referred to, it is shown

* The peace strength of a company is 4 officers and 91 other ranks.

that the United States of America, Belgium, Canada, Norway, Sweden, Spain and Rumania all have a larger proportion of officers to men than was the case with the Army here.

No Colours have as yet been issued to infantry battalions, but the matter is said to be under consideration. There are pipe bands of a sergeant, corporal and 11 bandsmen per battalion, and there is a very excellent "No. 1 Army Band" which comes under the School of Music in Dublin and is under the direction of a German, Colonel Brase.

Each battalion has a headquarter administrative company, commanded by the assistant adjutant, and seems to have a very complete set of specialists, such as police, storemen, shoemakers, tailors, barbers, armourers and gunsmiths, cycle mechanics, butcher, sanitary men, with a maintenance section, presumably only for station duty, of carpenters, mason, plumber, electrician, painter and glazier, and slater and plasterer. The senior non-commissioned officers are the battalion sergeant-major and the battalion quarter-master-sergeant.

The Armoured Car Corps.—The headquarters of the Armoured Car Corps is at the Curragh and consists of four companies, each of three platoons of five Rolls Royce cars. The companies are stationed at the Curragh (two companies), Cork and Athlone. The equipment of the cars is one Vickers machine gun and one emergency dismounted Hotchkiss gun. The total establishment of a company is 3 officers and 46 other ranks.

The Artillery Corps.—At present only two batteries of 18-prs. are authorized, but a third is ready in guns and *personnel* and only waiting official sanction to be numbered. A 4.5 "Howitzer" battery will probably be formed shortly, and an anti-aircraft battery is also under consideration.

The artillery headquarters and both batteries are in the old pleasant R.H.A. Lines at Kildare, some four miles west of the Curragh, and the corps appears to have attained a very high degree of smartness and efficiency, which, as an ex-gunner myself, it was very pleasing to note. Perhaps it is that one can throw a spot light more fully on a battery of mounted artillery with its men, horses and guns, than on any other unit, but certainly the Free State Artillery strikes one at once as keeping up well that standard which is so marked in our own Royal Regiment.

The batteries are four gun batteries, with 5 officers, 123 men, and 78 horses on the peace footing. On mobilization 34 more horses are added. The guns are the British Mark V 18-pr., though up to

date both batteries have drilled and practised with the Mark II. Only four of the Mark V have as yet been received, but these are to be fired this year when the annual practice with 500 rounds for both batteries is carried out. Two Lewis guns also form part of the equipment of a battery. Each battery has four ammunition wagons, but no other vehicles.

The horses seemed of an excellent stamp, although rather lighter than I have been used to connect with artillery horses in India, and the heaviest did not always appear to be in the wheel. The little driving I saw was very good, and the jumping of 8 officers' chargers in which not a single animal refused in some forty jumps taken struck me as remarkable. But Ireland has long been noted both for its horses and riders, and with no cavalry in the Army, the whole of its horsemanship has to concentrate on the artillery and transport. £25 per head is paid for the Free State Army horses, and up to £60 for officers' chargers; they are bought at fairs as required.

The officers' mess is beautifully kept up and is adorned with a number of Army trophies, far out of proportion to the small size—they number but 300 out of the 8,000—of the corps.

No extra pay is drawn by officers or men of the artillery.

The Army Corps of Engineers.—At present this corps has no field units, though during the troubles of 1922–1923 it furnished a number of bridging companies to the troops in the field to repair the damage done by the irregulars. These units had three ton lorries and part of their *personnel* were civilians. Now there are five “maintenance” companies—the headquarters, and eastern districts companies, the latter serving the two Dublin districts, the western districts company for Athlone and Limerick districts, the southern, for Cork and the old Kilkenny district area of the Curragh district, and the Curragh company, which also acts as the field training unit and dépôt.

The corps has a strength at present (June, 1928) of 26 officers and 642 men; of the latter some 370 are civilians, the numbers of whom are varied according to work requirements. The maintenance companies are principally occupied with the care and upkeep of barracks, forts, magazines and other military works. They also undertake the construction of works under the value of £1,000, anything over that figure being taken by the office of Public Works. Major maintenance works are carried out by contract. The whole system is very much the same as that of the British Army, on which it has been modelled.

A scheme for field units is now under consideration. It provides

for an Engineer Battalion, 800 strong, comprising two field works companies, one mining company, one light and one heavy bridging company, and one construction or communications company. These units would be entirely distinct from the present maintenance companies, but would probably work with them for a great part of the year.

The senior officer of each district is also the O.C. the maintenance company, and is called the district engineer. He is assisted by an assistant district engineer, also known as the works officer, by a stores officer and an adjutant. All officers of the corps must be qualified civil engineers. There are two or three schemes in contemplation for the provision of officers, including the training of cadets. It is probable that a scheme of granting temporary commissions to suitable individuals for a year, during which military training is given, will be adopted. The Corps has to compete against the considerable preparations being made for the maturing of the Shannon Electrical Supply scheme which is maturing next year, and for which many municipal and civil concerns will require qualified engineers.

At present no courses of training to other *personnel* than its own is given by the corps of engineers except in the shape of lectures at the Curragh, but with the formation of the field units this will probably be augmented.

Officers draw extra pay at the rate of 5s. per day for colonels and majors, 3s. per day for commandants and captains, and 2s. per day for lieutenants and second lieutenants. Non-commissioned officers and men draw extra pay, if qualified and classified, 3s., 2s., 1s. 6d. and 9d. per day, according to grade and group of trades.

The headquarters of the corps is in Griffiths (once Richmond) Barracks, in Dublin.

(To be continued.)

THE CUCKOO IN THE NEST

A TALE OF POST-WAR INTELLIGENCE IN A NORTH-COUNTRY TOWN

By "JABB"

ONE August evening P.C. Swaffham of the Borough Constabulary, Telton, Yorks, was on his usual round along St. Asaph's Road, the well-to-do quarter of that industrial town. He had just turned away from Langland Court when he was suddenly hailed by Mr. Fenton-White, who had come out of the front door as though awaiting an arrival.

"Oh! it's you, constable. I thought it might be our governess. She went out at half-past four and not back yet! Have you met her by any chance?"

"No, sir," answered Swaffham, "that I haven't." Then he added: "You mean that smart-looking French girl who's with you. I think I saw her last at the station when she came to show her registration book—but that's weeks ago. Good-night, sir."

He went down the drive until, by the gate, he spied two bicycle lamps coming to a stop in the road. Stepping into the shadow, he could just catch a masculine voice taking leave of a feminine companion in tender tones.

"Well," it was declaring, "this is the last time, sweetest, that I see you home here, isn't it?"

"What a mercy!" softly gurgled the other. "In another three or four weeks we may be abroad and clear of this . . . we shall. . . . Have you stuck the nail into my tyre, Frank? For decency's sake I must have an excuse. . . . Oh! it's mean to have to . . . but listen, there's half-past eleven." Then followed a lovers' farewell—protracted—repeated.

Not until the home-comer had entered the house did the watcher in the road move off. Swaffham, wagging his head, continued along his beat.

* * * * *

Next morning, Mr. and Mrs. Fenton-White, left alone over the breakfast-table, were discussing their governess's return.

"Well," he concluded, "I don't see how and why we should keep that young lady much longer. This is the second time she's come back outrageously late at night. Then, too, we can do without her; Phyllis is nearly twenty-three and Florence twenty-one. Surely they've had enough of her French and music. It's two years now she's been with them. And Jack's coming home for Christmas. I don't like her to be about the place to meet him. No, not after last night! I've always fancied her a bit free with young men."

"Oh, William, must you take it that way? The girls won't be happy without her; besides, she's making real ladies of both of 'em. You know how we've suffered from not having all the parlour tricks at our fingers' ends. Let's keep her at least till next year!"

Mdlle. Colombier, the subject of this argument, was the daughter of a French professional musician and a clever little Belgian actress. After being educated at Brussels and Vienna she turned to earning her living, being a talented young woman with a striking faculty of wearing her clothes well and a considerable facility for adapting herself to all surroundings. Without being a beauty she could pass as attractive in any society. Such was the governess or companion selected by Mrs. Fenton-White to instil the social graces into her two girls. The arrangement had proved an unqualified success, for Mademoiselle developed into a real friend to her two charges, who had soon called her "Jenny," her Christian name being Eugénie. So they frequented a dancing academy in Telton together, and often visited concerts, theatres and tennis clubs. The trio became well known and popular in local society. Mrs. Fenton-White might well grudge parting with this treasure.

After lunch, as she was thinking over the matter, Mademoiselle herself appeared with a serious expression on her face. Mrs. Fenton-White concluded that she was upset about her husband's outburst regarding the previous evening.

"Oh, Jenny!" began the warm-hearted matron, "I'm sorry if anything unpleasant occurred last night. But really you did bring it on yourself, didn't you now?"

"Oh dear, no! Mrs. Fenton-White," Jenny stumbled in her speech, "it isn't that. I don't believe you could understand and I hate saying it. Don't think me ungrateful if I say I want to leave you; but the fact is I intend to get married, and I fear that means leaving your friendly roof."

Mrs. Fenton-White shook her head. "Well, I thought when you came you would be too attractive a butterfly to stay long

with us. But the girls will miss you, won't they? What will they say?"

Jenny grew embarrassed and went off without a word.

Soon after, Florence appeared. Her mother, thinking this to be the propitious moment, made straight for the all-important topic.

"Flo, what would you say if Jenny was to leave us? I suppose it'll have to come some day?"

"Well," answered Florence listlessly, "I suppose she's free to go if she wants to. After all, Mummie, one of us, too, might suddenly take it into our heads to want to leave home."

Mrs. Fenton-White was more taken aback than she cared to show.

"Oh, Flo! do you mean marriage? If so, do be careful! You know what Daddy has said. He won't hear of any attachment to a young man who can't afford to look after you, who doesn't work hard, who hasn't got good professional prospects and all the rest of it. Oh! dear me, I dread the day—if it should come—when we may have to face your old Dad on a matter of that sort."

Florence looked grave.

"Oh, you dear old Mummie, as if we ever did want to leave you. But you know—I mean, Jenny may want to marry. Would it prevent her just because Dad or you say to her, "You shan't go!" or because he doesn't approve of what's really a good choice? Of course, she wouldn't think of giving up her life like that; she's too sensible. I should take her side every time."

Mrs. Fenton-White felt agitated. Were Flo and Jenny in collusion? Was Flo herself maturing some matrimonial project? Perhaps, if the disease were contagious, it might be better for Jenny to go, and that right soon.

"Poor old Mummie," murmured Flo, leaving the room. "If only father wasn't so intractable at times! There'll be an awful row yet before Jenny's gone."

Later Mrs. Fenton-White summoned up courage to mention Jenny's departure to Phyllis. The latter did not say much; in fact, she rather seemed to take it as a matter of course and ended by avoiding the topic as far as possible. Mrs. Fenton-White thought again: What on earth could it mean? Had Phyllis also joined in some conspiracy concerning the governess's matrimonial exit? It was growing obvious that both daughters were prepared for the governess's impending departure and marriage. The situation eluded her altogether.

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Mr. Fenton-White was in the smoking-room of his Club. Spying him there, Colonel Runton, commanding the Royal Artillery at Scartlan Barracks, three miles out of Telton, approached him. The Colonel, in his own eyes, was an important personage, for in addition to Scartlan he had the management of the Barnby Moor practice ranges, situated fifteen miles from Telton.

He soon came to the point.

"Mr. Fenton-White, I believe. I've not had the pleasure of making your acquaintance as fellow-clubman in a formal way"—this was the Colonel's fault; he had cherished no small disdain for the self-made manufacturer—"but I feel I must approach you on a matter of urgency without further ceremony. My name is Runton, commanding the artillery at Scartlan. I'm informed you have in your house a French governess of the name of Colombier"—the Colonel pronounced the word *Collumbeer*—"a smart, well-dressed young woman to look at." Mr. Fenton-White nodded. "I see I'm right. Now in my command there's a young fellow named Herriott, the Honourable Martin Herriott, eldest son of Lord Evenlode. He's a fine boy; did brilliantly in the war. But—between ourselves—Evenlode is awfully hard up and the boy can't afford—well, to put it quite plainly—to make a poor marriage. I know Evenlode and should hate his son to commit a matrimonial blunder. Imagine my horror at finding that this governess of yours is coming to barracks to see young Herriott and that the young fool is known to take her out."

Mr. Fenton-White was thoroughly roused. "I'm really grateful, Colonel. What you've just told me hardens my heart. I gave 'er the sack the other night, but put it off because of the wife and the daughters, who've taken such a fancy to the girl."

Runton, finding appreciative support, purred to himself and continued. "About six weeks ago I met Herriott in Telton with a young lady; he helped her into his car and drove off. Well, prying into other people's business isn't my hobby, but soon after I just jokingly mentioned to him how I'd seen him. He grew rather red and begged me to say nothing about it. A fortnight later, I noticed him one afternoon coming out of barracks to meet the same young person, who was waiting outside. He didn't see me, but I casually asked the sentry at the gate whether the lady had called for Herriott. He answered that she had sent a message in to him saying that Miss *Collumbeer* was waiting. Then again, a few days ago, my wife met Herriott speaking to apparently the same girl in Telton. This decided me to ask my sergeant-major, a discreet fellow, just

to find out from past N.C.Os. of the guard if they knew whether the young woman had been calling at barracks. Yesterday he informed me privately that she had certainly come for Captain Herriott three or four times in the past two months.

Now I am telling you something else in strict confidence. Since the spring I've had a series of artillery tractors at Barnby Moor for trial and Herriott has had charge of the experiments. The War Office warned me that the machines are to remain strictly secret. Now you know that, during the war, whatever the authorities pretended, the country was stiff with spies, and in France I was myself twice warned against female adventuresses of whom there were a lot about over there. It suddenly struck me I might have a double event on hand ; to save young Herriott and catch a clever spy. So two days ago, when I met the Chief Constable of Telton in the Club here—he's an old regimental pal of mine—I asked him if he knew anything about the young woman. This morning I heard he could trace only one person called Collumbeer—a French governess employed by you. He added that he had written to London asking if anything were known against her. Forgive my long-winded story, but there it is."

The two men soon parted. Mr. Fenton-White did not pay much attention to the spy details : to him these were fantasies of the military mind. But he determined to "have it out" with his family.

After dinner he did "have it out" with his wife, with the result that Mrs. Fenton-White soon left him in tears. He was still soothing his injured feelings when the front-door bell rang. Thinking it might be the postman, Mr. Fenton-White went to take his correspondence as he often did. To his surprise, it was not the postman but no other than P.C. Swaffham.

"Beg your pardon, sir," said Swaffham, "I've a letter here . . . to be delivered to you in person. The Superintendent also gave me some private instructions I have to inform you about before going on my beat.

"Come in here, constable," said Mr. Fenton-White, leading the way into his study. Having removed his helmet, Swaffham addressed Mr. Fenton-White as though from the witness-box.

"Well, sir, I fancy my instructions refer to that letter. I'm to tell you what I observed the other night, the 10th instant, at ten forty-five p.m. Being on night duty in St. Asaph's Road, I was testing front doors and I was going to leave your drive, after having a word with you on the doorstep. By the gate I saw two cyclists

draw up and I stepped into the shadow. The two persons, one male and one female, were speaking in low tones. They parted very affectionately and I heard the female cyclist remark that in three or four weeks they would be abroad, and that she would be clear of your place, sir. The male cyclist was called by her, Frank. Then, sir, I was told to request you, if you see anything suspicious about the young person's movements, to call up Woodward Lane station on the 'phone, and also, sir, that the constable on duty will be ordered to give you assistance if the young person should attempt to make a bolt or do anything forcible. Well, sir, I think that's all."

Mr. Fenton-White opened the letter. His brow contracted as he read the following text :

" SIR,

" I am desired by the Chief Constable of Telton to inform you that a young French governess, named Eugénie Colombier, at present in your service, has been reported from two sources as having cultivated an acquaintance on seemingly affectionate terms and simultaneously with two young men belonging to a class of society much above her own. The Chief Constable would hardly venture to trouble you if the case were not complicated by the grave suggestion that the young person is a dangerous adventuress who may be exploiting relationships of this nature for purposes of *espionage*.

" In strict confidence, I am to inform you that the first complaint has originated from Colonel Runton, C.B., commanding the artillery at Scartlan. He states that the young woman is entertaining friendly relations with Captain the Hon. Martin Herriott, of the 22nd Battery R.A. The second complaint emanates from Mr. C. Hanslow, manager of the Hanslow and Panting Aviation works at Sempring. Here the young woman has of late been repeatedly seen in company with a young flying officer called McNeale. She has, apparently, visited the works in his company and looked at some new aeroplanes being completed for the Air Ministry.

" I am to request, therefore, that you will take such precautions as may be in your power to prevent the young person finding an opportunity of absconding whilst inquiries concerning her are afoot ; I am further to inquire whether you could manage to call upon the Chief Constable to-morrow, Thursday, 12th instant, to discuss the matter with him, . . . "

Mr. Fenton-White was speechless. In his own mind Mdlle. Colombier was now convicted of the deepest villainy. Yet it annoyed

him intensely that he should be requested to keep her one day longer under his roof, and still more galling to have to take back his ultimatum to Mrs. Fenton-White as to the governess's dismissal.

A postman's knock now sounded and the butler brought in the mail. It was a heavy post. After a moment, Mr. Fenton-White addressed the constable :

"Look here, there are a lot of letters for this young woman. D'ye think we ought to open 'em and see what she's up to?"

Swaffham, however, was not a policeman for nothing.

"No, sir—I beg you—don't try that game. It's against the law, sir."

Mr. Fenton-White seemed disappointed.

"Well, at any rate, I suppose I can look at them," and he began scrutinizing each missive addressed to Miss Colombier.

"This one looks like a dressmaker's account from Telton; that's nothing . . . here's another from France. . . . That, I suppose, might be anything. Hullo! here's one, postmark Scartlan, with the regimental crest on the back! What's that mean? Could only be from that young ass of a soldier! . . . Another Telton postmark! . . . another milliner's letter by the look of it! She seems popular with 'em! Another postmarked Telton. Why, constable, see the back—"Hanslow & Painting's Aviation Works" . . . Well, I'm blessed! the cheek of it . . . a postcard, what's that? . . . do you know that, constable?" and he held out a picture postcard.

"Why, yes," said Swaffham; "that's Rollston's Submarine Cable Works' entrance and it's postmarked Sissington. That's where the place is, about twelve miles from here."

"What about the writing, constable? Look! here's some! What's it say? 'Meet 5 p.m. Saturday, as arranged. F.' Here! I'd better write it down, if I'm to see the Chief Constable."

Swaffham smiled. "Well, sir, that's pretty clear. If 'F.'—I take it that's another admirer—is going to meet her on Saturday as arranged, she don't mean to make a bolt of it before then, and to-day's Wednesday. She's safe. Well, sir, I must get on my beat."

Mr. Fenton-White retired smiling sardonically. Was the young woman playing with yet a fourth admirer? This must be the limit, surely? He was a long time falling asleep. The problem was too absorbing. What was her game? She was obviously in touch with three or four young men. Out of two, if not three, she was trying to extract valuable information. It was deliberate espionage. . . . Thinking of getting away abroad to dispose of her information.

. . . Going in company with number three, and who was he? These little affairs had been going on . . . how long nobody knew. He recalled the warning circulars that had come so often during the war . . . possible sabotage and espionage in his own works. Yes; there could not be a doubt: the people who sent out these circulars knew . . . knew all about these women. Yet he himself had allowed this serpent to coil itself up against his very bosom! What a fool he had been! She must not stay a day longer! He would have the laugh on his family yet. They had taken a violent fancy to her—called her “Jenny”: every time he heard the name, it angered him. He dreamed of spies . . . bearded them in their dens . . . pistol shots . . . motor chases . . . till he woke, only to fall asleep again—this time till the morning.

After lunch, Mr. Fenton-White called on the Chief Constable. The latter would not disregard the espionage aspect of the case, coming as it did from two such responsible sources. Captain Herriott was above suspicion, but said to be inclined to affairs of the heart. Young McNeale was the son of a gentleman well known on the turf. He had been at Sempring some six months in charge of some twenty men of the Royal Air Force taking over new machines. He was a bit wild and addicted to betting—said to be short of money. His antecedents would be examined by the Air Ministry. As for the governess, he had written to London to ascertain whether anything were known against her and begging for instructions. In turn he listened to Mr. Fenton-White's account of Miss Colombier's over-night's post.

“I don't know what to say,” resumed the Chief Constable, “it looks a case. But these matters are so very difficult to handle, that until I hear from London, I regret that I don't see my way to stir a finger. The war is now over. I'm deeply sorry for your predicament. But let me see what was on that postcard. Rollston's works at Sissington. They make a lot of radio-telegraphic gear for Government. That I know. It makes these espionage rumours still more probable. The Admiralty asked me only a few months ago to keep an eye on the place. ‘Meet at 5 p.m. Saturday,’ it said, ‘F.’ the initial. Ha! well that oughtn't to be difficult to trace.”

He rang for Mr. Russell, his assistant, who, after discussing the problem, went off to institute inquiries as to ‘F.’s’ identity.

Next day, after hearing by telephone from the Chief Constable, Mr. Fenton-White again proceeded to the Town Hall. He heard the reply from London: it was brief. No trace of Eugénie

Colombier was forthcoming, but particulars of the case were urgently awaited. On the other hand, the identity of "F." had been established. Rollstons had assisted an inspector in running through their registers. Out of four younger members of the staff on the books possessing an initial "F.," one was married and known never to go out, another was ill in hospital, a third was away erecting a wireless station, the fourth was Francis Wardle, a gifted young engineer, who had been with the firm four years. He was very favourably viewed and on the point of starting for abroad on a visit to some of the greater radio-telegraphic stations of Western Europe. Mr. Fenton-White took down his particulars, though far from pacified.

"Now, Major," he began, "tell me how long it'll be before I can pack off that young woman. I won't go on keeping her like that under my roof. Will London let me know definitely by next Monday or Tuesday?"

The Chief Constable recognized the point, but the possibility of effecting such a capture overrode all other feelings.

"Mr. Fenton-White, pray consider the issue at stake. I fear I can promise nothing until I ascertain what London wishes to be done. Do permit me to prevail on you to put up with her until then. It's so tremendously important not to indulge in any precipitate action. I still have to make sure that Wardle and 'Frank' are one and the same. As it is, I fear that Colonel Runton and Mr. Hanslow, in spite of my efforts, may spoil the game by talking to their young men. If you can, could you prevent the young woman from getting out alone? If you can't do that, I'll have her shadowed whenever she may have to be allowed out without adequate escort. I'll also see what action can be taken with regard to her correspondence."

But the manufacturer was not satisfied.

* * * * *

That afternoon, the governess, now bubbling with excitement, took Mrs. Fenton-White into her confidence. She was going to marry Mr. Frank Wardle, the young engineer from the Sissington works. She wanted three free days from next Monday in order to do all sorts of shopping and buy clothes. Mr. Wardle was to meet her in Telton on Saturday and make plans for the wedding. This decision to hasten the marriage was due to the firm having offered Frank to send him on a visit, on their behalf, to certain radio-telegraphic stations in Holland, France and Italy. The journey would provide an interesting and cheap honeymoon while permitting of Frank's introduction to M. Colombier in Paris. Thus

she prattled on, expatiating on Frank's excellent prospects, and it was all so natural that Mrs. Fenton-White became infected with her very obvious pleasure.

The atmosphere was brusquely chilled by the return of the master of the house, who was almost offensive to the governess. When he withdrew, his wife ventured to follow so as to put in a word about Mdlle. Colombier's impending departure. Being met by a frigid silence, she tried an appeal to his tender sentiments.

"Will," she began, "listen! Miss Colombier has asked for three days' holiday from next Monday"—her husband started and glared at an imaginary governess—"We must be kind to her; she's done a lot for the girls. Then she's going to marry. . . ."

"Marry!" shouted her husband. "Who?"

Mrs. Fenton-White, though scared by this outburst, stuck to her purpose: "A young engineer named Frank Wardle. He's a most promising young man over at the Sissington works. The girls are agreed we must do something for Jenny. . . ."

The growling storm so damped her courage that she left without concluding her plea. But her words acted as the spark to the quickmatch leading to the explosive. Seizing pen and paper, Mr. Fenton-White wrote several notes. At the end of half an hour they lay stamped before him. Then, entering the drawing-room, he went up to the governess and asked her icily:

"Can you bring Mr. Wardle here to see me at five o'clock tomorrow?"

Disarmed by his brusquesness, she acquiesced:

"Yes, probably, if I may telephone to him now."

* * * * *

Next morning the manufacturer received an urgent visit from the Chief Constable's assistant. The latter courteously but coldly, on behalf of his chief, acknowledged Mr. Fenton-White's letter of the previous evening; then he professed profound disappointment at Mr. Fenton-White's proposed course of action, as being unlikely to lead to a successful issue. But Mr. Fenton-White, thoroughly roused, could only see his side of the case.

"If the Chief Constable cannot arrest the woman, I decline to have my house made into a convenient place of detention for his purpose. I asked that the case should be settled quickly. I was told it was impossible. That's not business. So I'm going to act myself. That's the end of it."

Mr. Russell departed, barely able to extract Mr. Fenton-White's consent to be allowed to return to Langland Court that afternoon.

Accordingly, at ten minutes to five Mr. Russell arrived and found Mr. Fenton-White fidgeting over his letters at his writing-table. In the hall he left a constable in plain clothes ; this was Swaffham, who was intended to identify the male voice which he had overheard some nights ago at the garden gate, and also, in case of need, to effect any necessary arrest.

Next there arrived a spruce young gentleman, irreproachably tailored and of military demeanour, in a large motor-car. He was shown into the study as Captain Herriott. Evidently a prey to considerable agitation, he shook hands awkwardly with Mr. Fenton-White. The latter immediately construed this attitude as a symptom of a guilty conscience.

Mr. Fenton-White addressed him :

" Captain Herriott, I invited you to come to see me as I think I am entitled to ask an explanation as to what your relations are now and have been with Miss Colombier, who is a governess in this house."

Captain Herriott turned red and bit his lip and made some inconsequent reply.

" Well, Captain," resumed his interlocutor, taking courage from the apparent quandary of his victim, " you know Miss Colombier, don't you ? "

" Yes," came the unwilling answer. And so the interview dragged on with growing embarrassment on both sides.

At this moment there was shown into the study one Flight Officer McNeale. The young airman looked round in dismay at the gathering.

" Oh ! " resumed Mr. Fenton-White, once more emboldened by the sheepish expression of his visitor, " I took the liberty of asking you to come and tell us whether you have been acquainted with my governess, one Miss Colombier."

Young McNeale did not relish this unexpected question in public, but, unlike Herriott, he tried to carry it off in a jaunty fashion.

" Oh ! I say ! is it fair to ask a fellow questions like that about his lady friends ? But look here, sir, I'll have a word with you in private, if you like."

Mr. Fenton-White, however, was in a pompous mood. The weakness of the two visitors added fuel to his vanity and false courage ; so he went on, although further questions failed to elicit a definite reply. Herriott, after passing through a stage of uneasiness, was reaching the point of haughty resentment. McNeale started giving

more and more evasive and flippant responses. Mr. Fenton-White lapsed into a bullying tone, as it dawned on him that he would get little out of his victims.

Mr. Russell became interested. Although the question of espionage seemed to slide into the background, the interview revealed a nice problem. Why had both the young men from the beginning avoided acknowledging the other's presence? Surely, if both had been fooled independently by the same woman, they would have looked at one another in a different fashion. No! there must be something behind their attitude—probably collusion?

Mr. Fenton-White rang and inquired whether Mr. Wardle had arrived. He was summoned.

Mr. Fenton-White began with a sour face: "Mr. Wardle, I believe you propose to marry my governess, Miss Colombier?"

Frank Wardle acquiesced.

"Mr. Wardle," continued the self-appointed inquisitor, "are you aware that Miss Colombier has been inveigling the affections of those two gentlemen whom you see here all the time that she allowed you to be courting her?"

But Wardle not only possessed some moral stamina, he was also too much in love to let this pass.

"Mr. Fenton-White," he began, "I'm not here to allow any criticism of that lady which reflects on her honour. So, if that is all you wish to see me about, I'll be obliged if you will dispense with my presence."

Mr. Russell was better able to diagnose the position, which he did thus: "No! it's no good chivvyng Wardle. Firstly, he's a determined fellow and won't allow a word against the girl; secondly, the key of the problem does not lie there. Worse still, any questions or interference will make him shut up and the others will follow suit. Why can't the old fool stop? He's ruining all our chances of getting to the bottom of that spying story."

Mr. Fenton-White had never yet been browbeaten in his works or in his house. He determined to play his last card. He rang and summoned Miss Colombier. She entered, paused; took stock of the situation. Then, smiling significantly at Frank, she went up, first to Herriott, then to McNeale, and shook hands with them both. The two young men responded awkwardly, though McNeale managed to get up a wink. Mr. Russell, quick to see that action, was now convinced that there was collusion all round. Mr. Fenton-White's eyes nearly fell out of his head at the governess's coolness. He screwed himself up:

"Gentlemen, may I ask whether you are aware that this lady"—he emphasized the word significantly—"has been going about with all three of you and now proposes to marry one of you . . . ?" and he looked round to watch the effect of the broadside.

Not a word escaped the lips of a single member of the party, but Frank Wardle's looks showed rising anger. Then, to the utter stupefaction of Mr. Fenton-White, Miss Colombier burst into a peal of hysterical laughter.

"Yes, it's too ridiculous! I believe I must be engaged to three men at once. Oh! Frank, do laugh! And I believe I shall be arrested for it, for I saw our old policeman sitting in the hall as I came in."

Before Mr. Fenton-White could recover, the door opened. His two daughters, attracted by their governess's outburst, came in. The young men gasped and turned colour. Phyllis then spoke; she was trembling with suppressed emotion.

"Father, I'm to blame for all this. I've been engaged to Martin Herriott for the past two months. Martin was afraid of telling his parents, for they have old-fashioned prejudices. You see, we're manufacturers, not county people. Then, too, you know how you have laid down the law about my ever getting married: So I was afraid of you. Well, Jenny tried to help me—allowed me to use her name whenever I went to see Martin—carried messages to him—and all his letters came here addressed to her name. She used to pass them to me when she saw a regimental crest on the back. . . . I'm sorry now I've deceived you. But, father dear, I cannot give him up!" She went up to Herriott and burst into tears on his shoulder.

Mr. Fenton-White could not speak. Then, to complete his discomfiture, Florence now contributed to the revelation.

"Daddy, I've been wrong too. I've promised to marry Angus. Jenny helped me too, like Phyllis. She's been a brick!" No sooner had she shot her bolt than she fled.

Mr. Fenton-White suddenly recovered his power of speech with some ugly if picturesque words reminiscent of the factory:

" . . . Tricked . . . Flouted in my own home by two impudent girls. Backed by a brazen hussy of a foreign governess . . . *Never! . . . Never!*"

Mr. Russell got up, smiling to himself; without a word he slipped out, beckoning to Swaffham in the hall on the way.

"Sounds, sir," said the policeman, "as though there were a rift in the boot somewhere, sir."

Phyllis pulled Herriott away to find her mother. Angus followed while Wardle gladly closed the door of the study as though on an angry tiger. Outside stood Eugénie, who drew them all into the garden.

Mr. Fenton-White remained panting in his armchair. Five minutes later Phyllis reappeared with a defiant expression.

"Dad," she announced, "Mummie's asked the three men to spend the evening. Martin is first going to drive them out to fetch a change for dinner." She vanished, but before the door closed there echoed a shout of laughter.

Mr. Fenton-White recognized his governess's tones and leapt up. His spectacles fell to the ground; to a crunch of breaking glass he stamped on the hearthrug.

"D—— that woman!" he sputtered, then sank back in his chair.

His wife, poor woman, then came in hardly knowing whether to laugh or to cry, having just formally accepted both young men as future sons-in-law.

"Oh! Will," she stammered, "don't go on like that! Think of the girls! Don't be so hard-hearted! I can't. So I've asked all three men to dine at eight o'clock!"

"Woman!" he snarled—now limp as a wet bath towel—"are you going to drive me out of my senses as well as out of my own house?"

"Please, don't go on like that! What would Lord Evenlode and Mr. Andrew McNeale say to their sons owning a passionate old man like you as a father-in-law? Do think of it, Will."

The shot went home; Mr. Fenton-White was silenced. He ruminated as his wife went out. Then he went to the window muttering to himself: "Yes, think of it. But . . . No! I can't be defied in my own house . . . flouted by my own girls . . . tricked by my governess . . . Yes, but what would Lord Evenlode say of me? . . . Can it be? One of my girls marry his son, and the other to be a daughter-in-law of the owner of a Derby winner? . . ." He pondered yet harder; then he wiped his face; stared at the young people in the garden. His face slowly relaxed; then he left fly one sentence in a tone infused with a note that could only indicate mental elation: "Bill White, you'll be Sir William Fenton yet."

THE RETREAT FROM KABUL

(A SURVIVOR'S STORY)

THE following account of the retreat from Kabul in 1842 is a statement made by Sergeant-Major Lissant at Jelalabad on the 4th of April, 1842.

The sergeant-major belonged to the 37th Native Infantry—in pre-Mutiny days it was the custom for Indian regiments to have a European sergeant-major—and survived the horrors of the retreat as far as Jagdalak, where he was taken prisoner. Vincent Eyre in his account of the retreat mentions Lissant as having been taken prisoner and as having ultimately bought his freedom from the Afghans at a price of fifty rupees. The account differs slightly from that given by Kaye in his history of the Afghan War, as there is a variation in dates and in the actual sequence of events. The statement was discovered among the records of the Punjab Government. It is preserved along with the statement of Dr. Brydon—"the sole survivor of the Army"—the latter being a much shorter document. Both are in the same handwriting, and that of the Doctor is marked "copy." That of the sergeant-major is not so marked and is most probably the original, as it concludes with a forwarding note by (Sir) Henry Lawrence—then a political officer on the frontier—to his chief, Mr. George Clerk, the Resident at Lahore, and the latter note is in Lawrence's own handwriting. As Lawrence himself remarks, the sergeant-major was an intelligent man, and his graphic description of the sufferings of the retreating army is not without interest. The account is published in the sergeant-major's own words. It is as follows :—

Thursday, 5th of January, 1842, orders were issued by Major-General Elphinstone that the troops in garrison at Kabul should be prepared to march towards Jelalabad on the morrow in the following order : First bugle at 5 and the second at 6 a.m. Regiments left in front, Her Majesty's 44th Foot, Shah's * Sappers and the mountain train to form the advance, together with the 5th Shah's

* I.e. Shah Shujah's.

Cavalry under the command of Brigadier Anquetil. The main column under the command of Brigadier Shelton to be composed of the 5th Regiment Native Infantry, 37th Regiment Native Infantry in charge of the Magazine and Treasure, 12 guns Horse Artillery, Anderson's Horse, 6th Regiment S.S.F.* The rearguard under the command of Colonel Chambers to be formed of the 54th Regiment Native Infantry, 4 guns Horse Artillery and the remainder of the Cavalry, regimental magazine and baggage to follow in the rear of corps respectively. A road having been cut through the rampart near the rear gate, and the ditch filled in, the advance moved off from cantonments about 8 a.m. to lay down a temporary bridge across the Kabul river, the one built by Captain Sturt having been destroyed by the enemy; the bridge now formed to enable the Infantry to pass dry shod was made with the platforms of ammunition wagons and the doors of the barracks taken down for the purpose; when the bridge was finished, and a quantity of baggage across the river, a sudden stop was put to any more passing out of cantonment by order of the General; this was caused by a note received from Akbar Khan, stating he was not prepared to accompany us, but that on the morrow, Friday, after prayer, he would be ready with his escort. I cannot vouch for the truth of this, further than I heard several officers say so. Akbar Khan, I heard, also urged it was an unlucky day, and that, if we started, we must take our chance, for he could not and would not be responsible for the consequences. Accordingly, General Elphinstone ordered all the baggage back, as also the advance, when, as Lieutenant Haubry told me, several officers strongly opposed this and remonstrated with the General, who, when he saw so many opposed to him, wrote to Akbar Khan (as the same officer told me) telling him he would do nothing now but go on, but would wait his (Akbar Khan) arrival on the plain the other side of the Logar river. Accordingly, after two or three hours' delay, during which time the baggage had all crowded up about the gateway, orders were given to move on, but such was the press it was next to impossible to move. It was sunset when the 37th Regiment crossed the hill into Sew Sung; what time it was when the rearguard moved off I cannot say, but I heard Lieutenant Haubry say much of the baggage was yet in cantonment, when the enemy broke over the ramparts in all parts and that the troops left behind to prevent this *were ordered not to fire* but to get together as quickly as possible and move off from the garrison. Thousands of Afghans were in waiting to pounce upon the baggage,

* Shah Shujah's Forces.

and as it was getting late their patience seemed exhausted and they fell upon all they could lay hands on. The snow was about eight to ten inches deep, and we were from 6 o'clock in the morning until 8 or 10 that night, the 6th, before we reached the opposite side of the Logur river where we were to stop for the night. I cannot say what time the rearguard came in. I can safely aver that not one camel out of twenty that left cantonment reached the Logur river. Hundreds of the camp followers perished this night, being frozen to death, and numbers, both sepoys and followers, were unable to proceed on with the column next morning towards Bhool Khan and were abandoned, no kind of conveyance to be had. 7th, we started for Bhool Khan, and had not proceeded far when a sharp fire was opened upon us, and the road from Kabul was covered with Afghans following hard after us; from time to time some portion of baggage was left behind to give us a start, but in a short time they would be after us again like hungry wolves, no parties were thrown out, neither was the rear strengthened; consequently, they had to abandon the mountain train guns, Lieutenant Green being severely wounded and his sergeant killed—reached Bhool Khan and took up the best position we could, Her Majesty's 44th being detached to drive away the enemy from the hills, which they effected and maintained the post till night, when they were called in. Arriving early at Bhool Khan the camp was regularly formed, the regiments forming a kind of square facing outwards, and all the cattle and what baggage was left in the inside. Remained very quiet during the night, but, as soon as day broke, the enemy opened their fire on us. Her Majesty's 44th took up a position in the mouth of the pass and 2 guns of the Horse Artillery were also detached to the rear with the 37th Native Infantry which took up a position to the rear and left of the camp to prevent the enemy from coming down upon the baggage as it was loading, keeping this position for some time. Then Akbar Khan sent into camp to say he wished to speak to Captain Lawrence.* I saw two or three officers go to where Akbar Khan was, and one rode back to *halt* the column and baggage until Akbar's men went on in front to clear the pass. Her Majesty's 44th and 37th Native Infantry and 2 guns Horse Artillery, were ordered to form the rearguard under Colonel Chambers, and after a great deal of delay the column moved off. We were no sooner in motion than the enemy opened a terrible fire on us, and the party Akbar Khan left to protect and bring up the rear was most busy in plundering and murdering all they could

* George Lawrence.

lay hands on ; the 44th were told not to fire on the people in the rear as they were our friends, and the men forbore as long as they could, but, when so many of their comrades were falling around them, they could bear it no longer, but opened a fire upon all sides. By this time we began to enter the pass, and then a fire on both sides of the pass was opened upon us, which did much damage, the hills were covered with the enemy though not a man was to be seen. Their fire resembled the file firing from a square, and an incessant fire was kept upon our rear. By the time we reached that part of the pass where a barrier had been thrown across, the press was tremendous, as baggage, camp followers and soldiers all got intermixed, and, of course, great slaughter ensued. From this to the end of the pass there was no order or regularity among the troops—hundreds must have fallen this march, and the 2 guns Horse Artillery, after every man was cut down at his post, fell into the hands of the enemy. After getting through the pass the Cavalry and Horse Artillery were formed up facing the mouth of the pass while the Infantry passed on and formed up in columns of sections. When some order had been restored, the Infantry were ordered to move on while the Horse Artillery and Cavalry with some portion of the 44th maintained a position at the mouth of the pass ; some firing took place on both sides, but as I went on from this with my regiment I can say nothing more of what passed. At this time it was drawing towards sunset and it began to snow rather heavily. We proceeded about two miles from the pass and halted for the night. The Horse Artillery and Cavalry coming up shortly after, we encamped. We could see the enemy's fires on the hills all round us during the night, but they offered us no molestation. Daylight the next morning, the 9th instant, we prepared to march towards Tezeen ; some straggling shots were fired by the enemy as soon as they saw us in motion. The advanced guard, Her Majesty's 44th, moved and a portion of the baggage and camp followers. The 37th had taken up its position in column and was waiting the order to march when Captain Skinner rode up to say *we* were not to march to-day, orders being sent on ahead to recall the advance and baggage ; we returned to our old ground. I witnessed on my return the effects of the cold and snow upon all classes of natives. They lay in the snow in scores, dead and dying, and it was simply heartbreaking to witness the supplicating looks of the poor sepoys who were unable in any other way to ask for aid and assistance. We halted at this place, Khurd Kabul, on the 9th, and after midday I saw all the ladies leaving the camp and moving towards a large party of horsemen,

said to be Akbar Khan's, drawn up about 1,000 yards from the camp. During the whole of this day parties both of horse and foot occupied the hills about us and occasionally sent a shot amongst us. I heard Captain Skinner tell Adjutant Carty that one reason for not moving was that about 8,000 of the enemy had assembled at the pass of Tezeen, determined to oppose our march, and that it was necessary that Akbar Khan should proceed ahead and settle affairs. Next morning, 10th, we started from Khurd Kabul—as soon as we got into motion the enemy, who were on all sides round about us, opened their fire. I forgot to mention that Major Griffiths,* when he saw so few of the Corps while lying at Khurd Kabul on the 9th, ordered me to go and see the rolls of the companies called in succession and bring him word how many men he had left. I accordingly did so, and the return was 23 havildars, 17 naiks and 207 sepoy; out of these 100 men next morning were as many as I could call fit for duty, having had nothing to eat or nothing to lie down on and cover themselves with since leaving Kabul. Many having lain down were unable to proceed, their feet having become like large burnt pieces of wood and their hands so dreadfully swollen and cracked they could not hold, much less use, a musket. We started, as I said, under a sharp fire from the enemy, the 44th and 2 guns with some of the Cavalry forming the advanced guard, the 37th next followed, and had the treasure Rs.13,000 in charge; that morning how the other regiments followed I cannot positively say, but I believe the 5th Native Infantry followed the 37th, the 54th and Shahs Troops, 6 regiments forming the rearguard. We proceeded in pretty good order until we reached the corner where the ascent begins tending towards Kubber Subber Khan, there a terrible fire was opened upon us, and the followers got so mixed up with the column that all regularity and order was lost. I saw several of the followers bayoneted and shot, but nothing could keep them out of the column, and here commenced the slaughter that ended the native regiments, for both horse and foot rushed into the crowd and cut down without opposition both sepoy and followers, while numbers they contented themselves with stopping and driving back to Kabul; the advance in the meantime had pushed on and reached Kubber Subber, where I joined it. They were then endeavouring under the General and Brigadier Shelton to form and check the advance of the enemy, and after halting about an hour, during which time not a shot was fired by us, numbers of horse and foot passed our right and left, pushing on towards the pass at Tezeen. We marched from Subber Khan to

* Commanding the 37th.

where the ascent commences tending to Tezeen without much interruption, but as soon as, or before, we reached the bottom a very heavy fire was opened upon us from the heights on either side—a number fell here; we got into the valley of Tezeen about 4 o'clock and were much rejoiced to find ourselves rid of the snow. We were to have halted here, but several of the officers urged the General to push on. We started about 8 o'clock, leaving behind our last gun, a 12-pounder howitzer, taking care to spike it. From this place what remained of Captain Nicholls' troops Horse Artillery acted as Cavalry. From Tezeen to Seb Baba we had not a shot fired at us, but from this we maintained a running fight till we reached Jugdullak, which place we entered by the high-road, where we had some hard fighting chasing the enemy from several hills. We took up our night quarters in an old fort—the enemy in the meantime firing from the heights around us with fatal effect. We were all very much exhausted with hunger and fatigue when we reached Jugdullak, being on foot from the time we left Khurd Kabul, 8 o'clock on the 10th, till we reached this at 2 or 3 in the afternoon of the 11th. General Elphinstone had three bullocks killed here and fairly divided among all hands of Europeans. Towards evening some negotiations were carrying on as some Afghans came into our camp. 12th, we halted much to the regret of every one, as the enemy were forming on all sides and doing much damage among the men and horses. The 44th made some very gallant charges and drove the enemy from their position several times, although the men were worn out with hunger, so much so that as the horses fell both officers and men stripped their flesh off and in many instances ate it raw. General Elphinstone, Brigadier Shelton and Captain Johnston were taken away from us as hostages. About 7 o'clock this evening word was quickly passed amongst the Europeans that we were to march immediately and our situation somewhat explained to us. The officers exhorting us to hang together, as it was our only chance, for we should have to fight our way to Jelalabad. We started from Jagdalak about 8 o'clock on the evening of the 12th, leaving behind us all that had been wounded on the ground, as no means could be found to bring them on—it was heartrending to hear the poor fellows calling upon their comrades to endeavour to bring them on and not leave them to be cut to pieces by the enemy. Brigadier Anquetil led and commanded the column, and we had no sooner moved off than the enemy were on the alert, some making their way to the rear while some pushed on to the pass ahead of us. Little or no damage was done by the enemy's shot, it all passing over, till

we reached the barrier thrown across the road which ascends from Jugdullak ; here all was confusion, horse and foot and camp followers all got into a heap, no one could move for some time, such an awful press I never was in. Numbers were trod to death, and the enemy getting among the rear slaughtering away at pleasure, the cries and screeches of the poor fellows were terrible. Numbers must have perished at this barrier, which was so strong and intricate that it resisted the utmost efforts of the men to pull it asunder, and more than one-half of the 44th lost their muskets in endeavouring to cross it. On reaching the top of the pass beyond the barrier the men halted and formed up in sections, and we detached one company as a rearguard, the enemy all this time keeping up a sharp fire. We proceeded in this order for some time ; the rear kept constantly calling out for the advance to halt, while the officers were urging the expediency of pushing on and losing no time, as they said could we reach Gundamak by daylight we should be safe. This continued for some time, some of the men halting and others pushing on as requested till the cries from the rear became more loud and frequent to halt in front. The men in front then said the officers seem to care but for themselves, " Let them push on if they like, we will halt till our comrades in the rear come up." From this point some of the officers went on, and, as all order seemed abandoned, every man was acting for himself, and this continued until morning, when not more than forty men could have been left of the 44th, and half that number were without arms. The men were fagged and beginning to talk of proceeding no farther. I myself and four more still kept on, and as I knew the road I was in hopes by hiding during the day we could make our way to Jelalabad by night ; we kept on until we reached a cave, hungry and faint. What occurred to the small party we left behind I cannot say from my own knowledge, but one of my fellow-prisoners says the men being all completely knocked up determined to proceed no farther, and took up a position on a hill close to Gundamak for a last struggle. The enemy being in numbers about them firing had continued for some time on both sides, when a signal was made for the enemy to come up the hill. Major Griffiths was trying what could be done with the chief, Golaum Deen, when some of the men began to stop the Europeans and take away their arms, which, when the remainder saw, they opened a fire upon them, and this was signal for general slaughter.

This is all I heard that took place. On the morning of the 13th myself and the four men with me were observed during the day, and in the evening removed from the cave to a fort some distance

from it, where we remained five days, when we were taken to the fort where Major Griffiths and forty other prisoners were confined. I remained there until my removal on the 31st of January.

DEAR CLERK,

I have the pleasure to send you the statement of Dr. Brydon and Sergeant-Major Lissant ; the latter is an intelligent man, and has proceeded with Major Fraser to Ferozepore, and, if questioned, much may be elicited from him. Send the papers to Mr. Lawrence after perusal.

I have, etc.,

(Sd.) H. M. LAWRENCE.

4th April.

Peshwar.

NOTES ON FOREIGN WAR BOOKS

THE most important book of the quarter, General Huguet's *L'Intervention Militaire Britannique en 1914*, is dealt with in a special article. The other prominent ones are Colonel Valarché's on the battle of Guise, the history of the 26th Württemberg Division, and the report of the German Parliamentary Committee of Inquiry into the loss of the war.

WESTERN FRONT

La Bataille de Guise (Paris, Berger-Levrault, 15 francs), by Colonel E. Valarché, has the subtitle *Les 28, 29 et 30 Août 1914 au 10^e Corps d'Armée* ; but, though it deals mainly with the operations of that Corps, it throws a good deal of light on the battle as a whole, and agrees strikingly with the German official account of it in the Official Monograph, *St. Quentin* (in two parts), reviewed in these columns in April, 1923, and July, 1925. A map is not necessary for the general comprehension of the battle. It is sufficient to bear in mind that the part of the course of the Oise concerned, which we will call AB, runs east to west to Guise, and there turns south, forming the portion we call BC. Like other rivers in the part of France which the British Army knows, the Oise runs in a deep depression cut in the general plain, so that it is overlooked by heights, really the edges of the plain, on both banks. General Joffre, discovering that the German First Army (Kluck) had got ahead of the Second (Bülow), conceived the idea of attacking the former in flank. On the 28th of August he ordered the French Fifth Army (Lanrezac), which was retiring southward, to attack westward across the part BC of the Oise, towards St. Quentin: Lanrezac, not much liking the task, ordered the III and XVIII Corps and Valébregue's two Reserve divisions to carry this out, detailing the X Corps, with whose operations the book is concerned, to act as flank guard facing the part AB of the Oise, and directed the I Corps, which was on the extreme right, to march up behind the X towards Guise (B).

Colonel Valarché draws a picture of the state of the Fifth Army when called on to execute the delicate manœuvre of making a flank march across the German front.

"The troops were already very tired, but their moral remained good. The retreat had commenced with long marches. The movements of the Army were carried out mainly by night, units constantly went astray, and butting into neighbouring units added to their troubles.

"In rear the trains and various impedimenta were not in very good order; their frequent halts involved stoppages in the fighting columns, so much so that the troops, unceasingly delayed, were on foot nearly night and day. Deprived of sleep, they did not receive their rations regularly, for refilling was difficult to ensure. The supplies were sometimes deposited in the side of the road and the men picked up their bread as they passed; sometimes they were even without this. As for meat, there was no time to cook it. The buckets of water and wine which the inhabitants put outside their doors attracted men out of the ranks, and served to increase the disorder in the column. There were many foot-sore men; numbers of them could be seen behind every vehicle, hanging on as best they could, and being towed along. Every gun was garnished with a skewer of soldiers. Many of them had thrown away their valises; if they had not done so, they would have fallen from exhaustion into the hands of the enemy, and would not have been present to fight on the Marne. The soldier cannot carry 66 to 77 lbs. when there are no 'cookers' to replace the energy which he expends."

Yet "no criticism of the generals was heard, nor any complaint of what had happened. The soldier puts up with things in the vague and certain hope of a return of fortune which will come all at good time."

The flank march of the X Corps was not disturbed on the 28th; but in the mist of the morning of the 29th, the advanced guards of the German Guard and X Corps, which had crossed the Oise and were approaching the crest of the heights on the south bank, ran into its columns at right angles, much to the surprise of both parties. There are a series of sections in the book describing "the surprise at Audigny," "the surprise at Pusieux," "the surprise at Colonnay," "the surprise at Sourd," "the surprise at La Vallée aux Bleds." The French pulled themselves together in a most marvellous way, being, of course, quicker than the Germans at dealing with a new situation. There was desperate fighting from 8 a.m. to 1 p.m., but after that hour the German infantry made no further effort to advance. We know from German accounts that the Guard had suffered such heavy losses that although General von Plettenberg ordered a further general attack it was incapable of executing one. The really serious attempt of the German 2nd Guard Division to

outflank the X Corps from the east was outflanked itself by the spontaneous action of three companies of reservists, and of a horse artillery battery, and thrown back in disorder, or, as the German account delightfully puts it, "The commander of the Guard Corps was authorized after long and earnest discussion to withdraw behind the Oise."

Whilst the X Corps was surprised in flank by the Germans on the left bank of the Oise, AB, the German X Reserve Corps had been similarly surprised by a division of the French XVIII Corps which had crossed BC; but in view of the serious threat on his right flank, General Lanrezac felt compelled to stop his offensive towards St. Quentin. Towards 1 p.m. the situation of the X Corps had been so far restored that, as the I Corps had come up on its left, he ordered a counter-attack northward, and directed the X, I and III Corps "to drive into the Oise the enemy who had crossed on to the left bank."

Time was, of course, necessary to pass on the Army orders, dispatched between 1.45 and 2 p.m., and they did not reach brigades until "it was too late to execute them before night fell." Thus the three German divisions still across the Oise escaped the attack of the six French ones available.

Next day the adventurous position of the Fifth Army, well to the north of the Fourth Army and the B.E.F., which had fallen back on its flanks, made a retirement a necessity. It drew off undisturbed, for the Germans did not move until 2 p.m., and, finding the enemy gone, Bülow thankfully gave his Army 36 hours' rest.

The claim that the X Corps fulfilled its duty as flank guard successfully seems justified, though there is no explanation why its cavalry did not discover the presence of the enemy in good time.

Paris en état de défense 1914 (Paris, Payot, 25 francs), by Generals Hirschauer and Klein, with a preface by Marshal Joffre, contains a very full account of the measures taken to put the French capital into a state of defence, and incidentally some odd items of information of general interest not to be found elsewhere.

In spite of its importance and its open position, Paris had never been properly fortified. Vauban had in vain advocated that this should be done; in 1818, after the Allies had entered the city in 1815, the matter was taken up; but only in 1840 were the necessary funds obtained, and the enceinte and forts were then gradually built. In 1870 these were out of date; yet at the beginning of the war of that year nothing was done to improve them, except to

construct a few additional earthen redoubts. In 1873 the general scheme of the fortification of the country was taken in hand, and an outer ring of forts was constructed by 1880. Unlike the defences of the Eastern frontier, those of Paris were not kept up, or, in view of the increase of the power of artillery, the concrete over the shelters strengthened, and August, 1914, found them practically as they were in 1880.

“There was certainly a defence scheme. Everything had been foreseen, studied and prepared. The fortress existed on paper, but nothing had been done on the ground.”

When General Michel, Joffre's predecessor, was Chief of the Staff, the defence plans had been thoroughly revised, and a scheme evolved which could be carried out in a short time, semi-permanent works, with concrete shelters, and field works being planned instead of elaborate forts. The existing outer forts, some fifteen miles out, were to be elaborated into three great positions extending to eighteen miles out, north, east and south-west of Paris; whilst two long field positions, some twenty-two miles and thirty miles out, covered it on the north, with bridgeheads at important river passages. On the 3rd of August, 1914, the first step to construct these was taken, orders being issued to contractors to begin the concrete shelters.

The authors, both very eminent engineer officers and Staff College graduates—General Hirschauer eventually in 1918 commanded the French Second Army, and General Klein at the end of the war was Inspector of Engineer Works at G.Q.G.—show how minute had been the engineer preparations to get on with the work rapidly, and how plans had been made to use available but up-to-date material: expanded metal for revetments, corrugated iron for roofs of shelters, and barbed wire. But in August, 1914, little labour could be got. The units assigned were nine companies of reserve and territorial engineers, three of which were taken from divisions, and 32 companies of the reserve of the Territorial Army, not due to appear until the 22nd of August. When they did assemble the men had to be vaccinated, and there was no clothing for them; such was the enthusiasm that more reservists and Territorials than expected had joined at the depôts and taken what uniforms and equipment there were available.

Little was indeed done until General Galliéni on the 26th of August was appointed Military Governor of Paris. By this date only the excavations for the concrete shelters had been dug, the contractors employing old men and boys not liable to service.

Galliéni removed the Chief Engineer and put Hirschauer, the junior of the engineer generals, in his place, with Klein as his deputy. He then had one formal meeting of the "defence committee," which was the legal and financial authority, and having obtained the signatures of the members he never assembled another.

The first step taken was to arrange for barricading all the entries into Paris through the enceinte, so as to prevent a surprise entry, like that which the Germans had achieved at Liège. Even the sewers were blocked. Labour was obtained by appealing to the Union of Syndicates, who found 23,000 men. The authors record that only one man exhibited Communistic tendencies and "sowed the bad word." The non-commissioned officer who failed to arrest him at once was broken.

Besides construction of works, the clearing of the ground (the minimum was done), the construction of additional bridges, the preparation of bridges for demolition, the settlement of the question who should be responsible for giving orders for demolition, the collection of stores and tools, all took time and energy. The Government at Bordeaux and the local authorities seem to have put every possible obstacle in the way of the military, and to have pestered them with correspondence if they in any way upset the ordinary peace routine of the country. Yet by the 3rd of September, when the enemy was nearing Paris, although the entrenchments were not finished, there was a parapet the infantry could defend, all the batteries had at least 50 rounds per gun, the forts were ready, and the garrison at its stations. On the 5th, orders were issued to organize a succession of new lines, and to prepare to destroy everything that could be of use to an enemy advancing into the entrenched camp. The first news that Kluck was sheering off Paris and going south-east seems to have been obtained by a commandant of forest guards, whereupon aeroplanes were sent out to verify it, and upon arrival of confirmation, Galliéni's staff cried out :

"They offer us their flank. They offer us their flank."

By the 9th of September, when, according to Kluck, he had only to advance to annihilate Maunoury's Army and then turn on the British, there was one well-defended line, and a number of subsidiary ones, besides the forts and the defended areas round them, as positions for Maunoury's men ; so there was nothing but the prospect of heavy loss in front of Kluck if he had marched on Paris. Another German legend goes by the board.

An attempt is made to clear up the mystery of the attempted premature demolition of the two bridges—one stone, one iron—at

Lagny. As the British 4th Division approached the town in the retreat, about 1.30 p.m. on the 2nd of September, French engineers had already begun to blow up the iron bridge, and the charges were ready in the other. It is explained that the explosion was merely "a preliminary one, made in order to blow a hole in the iron plates supporting the roadway in order to get access to the girders." Twenty-four hours later, when the British had crossed, at 2 p.m. on the 3rd, an officer of the British III Corps staff, "signature illegible," gave a written order to blow up the damaged bridge to the French engineer officer in charge, who half an hour afterwards demolished *both* bridges. The account ends quaintly :

"From the point of view of the defence of Paris the destruction of the bridges of Lagny had a tiresome result ; it interrupted all communication between the two ports of the advanced zone. It is comprehensible that the captain in charge of the technical execution carefully kept the order which cleared him of responsibility."

Yet it specified only one bridge, "the upper one," and, in order to make it as far as possible fool-proof, added in brackets, "the iron bridge." The authors then congratulate themselves that the British did not blow up other bridges in the zone of their march ! The action taken by the British had been merely to prevent the French from destroying the bridges before they had crossed.

The British Official History of the War "1915, Volume I," in describing the second battle of Ypres (22nd of April–25th of May, 1915) has pointed out that many German accounts of the battle omit all mention of the use of gas and ascribe the initial success obtained to German prowess. This is the course taken in the recently published history of *Reserve-Infanterie Regiment Nr. 243* (Dresden, Baensch, 10½ marks), "compiled with the assistance of the official war diaries." Sixteen pages are devoted to the battle, in which the Regiment took part in the 53rd Reserve Division of the XXVII Reserve Corps. The narrative for the 22nd of April, the day of the first gas attack, merely says :

"An attack broke out from the line of Steenstraat—Langemarck, after ample preparation [a nice euphemism for poison gas], and gained an area 9 km. wide and 3 km. deep."

Similarly, about the gas attack on the 24th of April against the Canadian Division, we are only told that : "the storm-brigade Schmieden, by evening reached the line Hill 37 north-west of

Zevenkote—crossroads north-west of Gravenstafel.” The said storm-brigade Schmieden, now said to have been made up of two composite Regiments, Regiment Reussner (2 battalions of the 241st Regiment and one of the 242nd), and Regiment Wilhelmi (2 battalions of the 78th Landwehr Regiment and one of the 244th), was one of the several composite brigades mentioned in accounts of the battle, which make the narrative so difficult to follow and the German losses so easy to conceal.

The Reserve Infantry Regiment No. 243 lost at first Ypres 67 officers, 242 non-commissioned officers and 2,616 men, leaving it with 13 officers, 54 non-commissioned officers and 411 men. At second Ypres it lost officers, 4 killed, 18 wounded; other ranks, 85 killed, 340 wounded, a sufficient index of the relative severity of the fighting in the two battles. At the Somme, in 19 days, the casualties were 14 officers, 976 other ranks.

The total losses in the war are finally given as :

	Killed.	Wounded.	Missing.
Officers	48	117	17
Other Ranks	1,905	5,523	1,554

Investigation as to the fate of the missing is still proceeding.

Vor Verdun (Before Verdun), by Major Erbeling (Stuttgart, Belser, 6 marks), is somewhat disappointing; the story begins only in August, 1917, and deals mainly with the doings of the 2nd Battalion of the 479th Infantry Regiment of the 243rd (Württemberg) Division in the defensive battle in September, 1917, and the attack on Hill 344 in October. The only remarkable thing in the book is the number of Iron Crosses and decorations bestowed on the battalion in October–November, 1917, viz. 127 Iron Crosses and 85 Silver Distinguished Service Medals and nearly as many more in December–February, when literally nothing was happening. “Instructive conversation with General von Falkenhayn” appears as a headline, but it turns out to be the Chief of the Staff of the XVI Corps, not the Chief of the General Staff, who is meant.

The official history of the 26th Württemberg Division, *Die 26 Infanterie Division im Weltkriege 1914–1918* (Stuttgart, Belser, 10 marks), is in two volumes by two different hands, and of very unequal value. The first, dealing with 1914–1915, seems to be an emasculated edition of the divisional General Staff war diary; the other, concerned with the last years of the war, is an excellent narrative, which even gives the losses, unmentioned in the first

volume. As one of the few complete divisional histories that the Germans have published, a summary of it may be of interest.

The division originally belonged to the XIII Corps of the Fifth (Crown Prince's) Army. Of the famous night attack on the 9th-10th of September at the close of the battle of the Marne, the book says :

" 7.30 p.m., corps order, in compliance with an Army order, by which a night attack on the night of the 9th-10th of September should result in the 26th Division obtaining possession of Hill 309.

" The order for the night attack arrived so late that there could scarcely be mention of thorough reconnaissances and preparations. Staffs and troops of the division therefore regarded with little confidence the night attack, which was to cross the railway line at 2 a.m. on the 10th. A battalion of Grenadier Regiment No. 119 of the 51st Infantry Brigade was held in divisional reserve.

" The division advanced at midnight in two columns, so as to get possession of the railway from . . . to . . . by 2 a.m.

" Right column, 51 Inf. Brigade (less one battn. of the 119th) with a battery and $\frac{1}{2}$ engineer coy.

" Left column, 52 Inf. Brigade (less 3 battns.) with a battery and $\frac{1}{2}$ engineer coy.

" The attack (up to this point carried out as noiselessly as possible) was then to be made relentlessly with blowing of German bugle calls to the line. . . .

" The divisional reserve was to be at 2 a.m. at . . . The divisional staff was at northern exit of Sommaisne. At 1.30 a.m. weak infantry fire, after a slight increase, had gradually died down. At 3.35 a.m. a report of the 51st Infantry Brigade arrived to the effect that Vaux Marie Farm (on the railway) had been taken and the brigade was digging in there. On which the Brigade was ordered to advance to the objective ordered, and not to dig in till it got there. Two available battalions of the 127th (of the 27th Division) received orders to capture Hill 309 and the batteries posted there. At 6.05 a.m. the III Battalion 125th was at Vaux Marie Farm (on railway), but could not advance on account of flanking fire. The farm was in flames. Of the 52nd Inf. Brigade, 27th Division, and of the 77th Inf. Brigade, there was no news. The artillery of the Division had come up to a covered position behind Hill 302. An orderly officer sent forward reported at 7.30 a.m. that the 51st Inf. Brigade had taken Hill 309. The 27th Division was echeloned to the right behind it. There was no connection with the 52nd Inf. Brigade. At 8.30 a.m. the 51st Inf. Brigade asked for further artillery support. At 10 a.m. the divisional staff on a (false) report of a retirement of the 51st Inf. Brigade rode to the heights south-east of Sommaisne. The divisional reserve was moved up. The report of the retirement was much exaggerated. At 10.40 a.m. the 51st Inf. Brigade itself reported that it would hold the hill 'Signal d'Erize' to the last. It was suffering severely from gun-fire.

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"The night attack ordered at a late hour led to a definite crisis in the front line, and to heavy losses, particularly in the 125th Inf. Brigade.

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"11th Sept. The enemy's artillery fired the whole day with only short pauses. . . . In spite of the arrival of the Mortar Battalion (2.30 p.m.) the enemy's artillery was greatly superior.

"12th Sept. At 2 a.m. a corps order directed a movement of the troops to the north [that is a retirement] by order of the Supreme Command."

The 26th Division was sent up to Flanders in October, 1914, and the book shows that the account given in the British Official History, Volume II, is correct as regards its taking part in the attack on La Vallée—Ennetières on the 23rd of October, and being held off for many hours by the 2nd Sherwood Foresters. It received orders at 11.15 a.m. to take La Vallée, but did not succeed in doing so, with the assistance of the 25th Reserve Division, until 7.30 p.m.

It was employed in the attack on Messines on the 30th of October—1st of November, when the history admits it had against it only "three British cavalry regiments, an Indian regiment and parts of the British 2nd Cavalry Division." "The 119th Grenadier Regiment had heavy losses, so that it was doubtful whether it would hold out any longer." The arrival at Messines of two heavy Minenwerfer and a 4-inch gun battery eventually turned the combat in German favour.

From December, 1914, to November, 1915, the Division was in the Russian and Serbian theatres.

With the return of the Division to the Western Front in January, 1916, where the second volume begins, the narrative becomes of more interest. After a short rest in the Ardennes, the Division went to Courtrai and then to the Zillebeke—Bellewaarde sector, where it found a notice stuck up in large English capitals, "A friendly welcome to our old XXVI Division." It found the scene very different to what it had left in December, 1915 :

"the charming Flemish country, with its pretty chateaux surrounded by parks, its idyllic woods and well-cared-for poplar bordered roads, had been turned into a wilderness. The cottages and factories were heaps of rubbish, whose ruins had been used to repair the bottomless roads. The copses were a horrible confusion of rotting wood. The Menin road was a chain of morasses."

One feature unknown to the British is mentioned :

"From about the point where the Menin road begins to fall after leaving the Herenthage park, the road surface had been mined. The

tunnel excavated this way was half a mile long, and ended at the Höhenstellung. Lighted by electricity and furnished with beds, the tunnel provided shelter for a whole reserve company."

The division was engaged 2nd-13th of June in the action known to us as "Mount Sorrel," undertaken in order to better observation facilities. The divisional commander protested and said that he could take the ridge but could not hold it. He was proved to be right—at the cost of 3,436 casualties.

On the 1st of August the Division was put in at the Somme, taking over the Ginchy—Delville Wood sector. The history says :

"The days on the Somme belong without any doubt to the worst which the Division had to go through in the whole campaign. It had to endure three weeks of the hell of the battle of the Somme.

"No layman, no peace-time soldier can imagine what it is to lie still days and weeks under enemy drum-fire, expecting death at every instant, crouched amid mud and dirt in filthy cellars or slimy shell-holes, hungry and thirsty, and all the time strained and watching for the foe till it pleases him to attack. It must be lived to be understood.

"Most depressing for the moral was the ever-obtruding consciousness that the enemy if not superior in courage and endurance was far better equipped with fighting material, living and dead."

The three weeks on the Somme cost the division : killed, 13 officers and 474 men ; wounded, 33 officers and 1,629 men ; and missing, 18 officers and 768 men ; total, 2,935.

The Division was sent to the Wyttschaete salient for rest from the 2nd of September to the 11th of November and lost there 14 officers and 796 other ranks, and then went back to the Transloy sector in the Somme area. It had complained of the miserable condition of the trenches in the Wyttschaete sector :

"Now what can be said. The front position consisted only of shell-holes only partly connected together. . . . Everything that made life in the trenches endurable was absent. There were no usable dug-outs, not even shelter from the weather, in existence. This would not have mattered in summer, but now it was winter and this made matters serious. Painfully we missed the protecting wire entanglements : in front of the shell craters of the first line were only a few wire cylinders. . . . There were scarcely any communication trenches. The whole of the traffic to the fighting troops had to pass over the open crater field. There was no shelter, however, to be had in the craters, as they were full of water, and one could get drowned in them. . . . The troops suffered more from the miserable conditions of the shelterless position than from fire. . . . It was a nearly unbearable martyrdom."

In three and a half months the Division lost 1,502 men by fire and 1,200 by sickness.

The retreat to the Hindenburg Line was begun on the 16th of March, after the greater part of the artillery had been withdrawn. The rear guard retired at midnight of the 17th-18th. It was undisturbed. "The division could not have remained in the fighting line much longer; . . . the Siegfried movement [the retirement to the Hindenburg Line] was accomplished by the expenditure of the last strength of the infantry."

The Division was in second line when on the 9th of April, 1917, the British quite unexpectedly and very much by surprise captured Vimy Ridge, and next day it took over the sector—from west edge of Monchy to Rœux—of the 11th Division, "which had suffered heavily and was exhausted."

"There were no trenches, but gaps in the line everywhere." The Division was, however, left in peace for twenty-four hours and was able to establish itself. In the fighting up to the 28th of April, when it was relieved, it lost 1,495 men. It was out for rest until the 16th-17th of May, when it returned to the Scarpe and remained 2½ months, losing 1,900 men (500 sick) in trench warfare.

On the 17th of August the Division was put into the Passchendaele battle to hold the St. Julien—Langemarck sector.

"A connected line of battle and a well-thought-out distribution in depth was impossible in this chance position. The foremost men formed a thin line of posts in shell-holes; behind them small parties took position to receive the first onslaught and to repulse weak attacks. Behind them again were shock companies, and still farther back, distributed wide and deep, shock battalions. The troops tried to hide in a fold in the ground, and clung tight to a hedge, where they believed themselves concealed from the enemy's eyes, including those in the thickly populated air. Here and there only was there a concrete shelter."

The British artillery is praised for the systematic way in which it destroyed cover, and knocked out one concrete shelter after another. The Division remained in the line until the 4th-8th of September.

"The martyrdom of the Flanders searching fire had lasted long enough. Signs were increasing that the officers and men after one and a half years' employment in the main fighting fronts were at the end of their resources, and were not equal to a third day in pitched battle. The Division threatened to collapse both mentally and physically."

In a fortnight it had lost 1,755 of all ranks.

It was now sent to rest at Saverne and Pfalzburg in Alsace and be equipped for and practised in mountain warfare, with a view to its employment in Italy. Between the 23rd of September and the

7th of October it was dispatched there and took part in the Caporetto campaign. "In contrast to the Western Front, the food supply right up to the front line was excellent." The casualties are not mentioned.

Returning to France, the 26th Division was in the Supreme Command Reserve on the 21st March of 1918, and did not come into action until the 26th in the Moyenneville—Hamelincourt sector (opposite the junction of the 31st and Guards Divisions of the VI Corps).

"The enemy had obviously evacuated his position according to plan. Only this explains the fact that of the strong enemy artillery masses which were located, not a single gun was captured."

In the next six days the Division lost 329 men without accomplishing anything. It was at once put in again between Beaumont Hamel and Hebuterne, where it remained until the 12th of May. After a rest it was sent to take part in the second battle of the Marne, in which in a week it had 1,155 casualties. Remaining on the French front, it gradually retired north-eastward towards the Meuse position in front of Dinant, without severe fighting, but suffering further losses up to the 1st of August, of 331, plus 423 sick.

The strength of the battalions (including sick) now averaged 635. Its further losses up to the 31st of October were 2,121.

"The Division made the exhausting return marches back to Germany in good order. It happened repeatedly that columns of troops other than Württembergers, who had hoisted the red flag, crossed its route, and were compelled by the men to pull down this rag."

There are orders of battle and sketch-maps, but no table of the total casualties.

The history of the *Jäger Battalion Nr. 13* gives a roll of honour of dead amounting to 1,262, that is more than its establishment. It includes a certain number of men who died, died of wounds in hospital and a few missing. The book is mentioned here because it has the naïve footnote to the roll: "From official sources without guarantee of correctness."

That the dead sometimes exceeded the establishment is confirmed by the history of the *Infanterie Regiment Nr. 13*, which gives a roll of honour by name of 175 officers and 4,038 non-commissioned officers and men.

At Neuve Chapelle the Regiment lost: killed, 137; wounded, 354; missing, 779; total, 1,272.

At the Somme (9th to 22nd September) it lost : killed, 174 ; wounded, 852 ; missing 121 ; total, 1,147.

The losses in the March, 1918, offensive are not given, but on the 1st of April, 1918, the battalion strengths were :

		Officers,	N.C.O.'s.	Men.
1st Battalion	.. ..	9	43	203
2nd Battalion	.. ..	9	41	256
3rd Battalion	.. ..	8	27	137

GENERAL

Historique du Régiment de Marche de la Légion Etrangère (Paris, Berger-Levrault, 10 francs), is the regimental history of that portion of the French Foreign Legion which fought on the Western Front in 1914-1918. There is a certain amount of preliminary matter of general interest.

The Legion owes its origin to Napoleon, who in the Hundred Days organized eight foreign regiments. On the Restoration a selection was made from them, and the Royal Foreign Legion, which took the name of the *Légion de Hohenlohe*, was formed. In January, 1831, it was disbanded, and in March of the same year reconstituted as the Foreign Legion. In view of the constant "reorganization" of the British Army, the reforms usually amounting to no more than a change of name, it is interesting to note that the Foreign Legion was thus re-formed seven times between 1831 and 1914. Only one important change, however, took place. Up to 1835 there were separate battalions for different nationalities : 3 for Germans and Swiss, 1 for Belgians and Dutch, and 1 each for Spaniards, Italians and Poles. After that date the principle of "fusion" was adopted and maintained, with excellent results. The history is at pains to insist that the Legion is a lay military order, in which there is a "superior," the commander ; a "rule," discipline ; and "religion," that of the Colours. It serves as a charitable institution and a haven of refuge for those who would without it go under or join the criminal classes.

In 1914, as no foreigner could according to law join the national Army, all applicants, and there were many among the foreigners domiciled in France, and neutrals, were passed to the Foreign Legion. *Depôts* were formed in Paris to receive them, and cadres, from which Germans and Austrians were excluded, were dispatched from the normal Legion in Algeria and Morocco, in order to constitute the *régiments de marche*. Four regiments were thus formed, which in 1915 were amalgamated into the *Régiment de marche de*

la Légion Etrangère. Few units attained such honours as this Regiment. In June, 1916, it was awarded the *Fourragère* of the colours of the *Croix de Guerre*; in June, 1917, that of the colours of the *Médaille Militaire*; in November, 1917, that of the colour of the *Légion d'Honneur*; and in October, 1918, the *Fourragère Double* of the colours of the *Légion d'Honneur* and the *Croix de Guerre*.

The German Parliamentary Inquiry into the causes of the collapse in November, 1918, has been mentioned from time to time in these Notes.* The four final volumes of the report, Nos. 4, 5, 6 and 7 (in two parts), entitled *Die Ursachen des Deutschen Zusammenbruch im Jahre 1918. Das Werk des Untersuchungsausschlusses 1919-1928* (Berlin, Deutsche Verlagsgesellschaft für Politik und Geschichte, 20 marks a volume), have now been published. They contain reports of the proceedings, the appreciations of the experts employed by the Committee of Inquiry, and many documents, and they deal with "The general causes and progress of the internal collapse," "The stab in the back"; "The German Reichstag in the world war"; and the conclusions arrived at by the Committee—unanimously, the Communist member abstaining. The most interesting part is contained in the appreciations of the causes of collapse by the experts: General von Kuhl, Colonel Schwertfeger, Professor Delbrück, Herr Katzenstein, Dr. Herz, and Herr Volkmann, and a paper by General Graf von der Schulenburg on "the state of the Crown Prince's Group of Armies in the last months of the war." The volumes are indeed an encyclopædia of information on the subject of the collapse, and the various papers each require a long review, which should some time or other be undertaken.

It will be recalled that the conclusions reached by the Committee on the military responsibility for the collapse were distinctly non-committal and compromised nobody. The Kaiser, the Supreme Command, the Chancellors and the Government, and the Army were whitewashed, and the offensive of 1918 was held to have been justified and carried out with all available resources. The ascendancy of the Supreme Command over the Government, which contained no personality capable of opposing the will of Hindenburg and Ludendorff, was, however, admitted.

The conclusions of the Committee as regards the causes of the internal collapse are equally vague. It is attributed to the action and reaction of many factors, and, it is said, cannot be put down to

* July, 1923, and January and April, 1928.

any particular one. Even before the war there were many warring factors in Germany, due to the desire of large numbers of the people—labelled Social-Democrats—for Parliamentary Government, and the determination of the Kaiser and the officials to yield as little as possible of the personal power. Outwardly the declaration of war healed all differences and made a really united Germany, but underneath all the differences persisted. The failure of the German leaders at the battle of the Marne, the defeat at Verdun, and the increasing lack of food and raw material aroused a longing for an early peace. Apparent injustice (really muddling) in the distribution of food supplies, and profiteering, reawakened class hatred. Further, the objects of the war were not made clear: the idea of a defensive war—and the Government claimed to have taken every step to avoid war—could hardly be maintained when it was obvious that there was a strong annexationist party; and suspicions, not allayed by the censorship methods, were entertained that the Supreme Command and the manufacturers were responsible for actually obstructing peace efforts. The Socialist Party began to show its head again, pacifist and revolutionary propaganda appeared; but there was no serious trouble until 1917, when the Russian revolution [for which Germany itself was responsible] showed what might be accomplished. In this year, after the failure of unrestricted U-boat warfare, there was trouble of a mutinous character in the Fleet, ascribed to political influences, as numbers of sailors joined the Independent Socialist Party in the hope of hastening the conclusion of peace. The peace resolution in the Reichstag and the fall of Bethmann-Hollweg, and the reception of the peace endeavours of the Pope gave indication of the internal struggle on the peace question; but after the summer of 1917, there was no further unrest in the Fleet until the autumn of 1918, and, though it is not stated in the volumes, the first mutinies in 1918 were in the Army in divisions at the front, not among the seamen. The real fight in the interval was for Parliamentary control of affairs, and, engaged in this, the parties concerned seem to have almost forgotten the war.

There is an index of the persons named in each volume, but no subject index.

So heavily does "war-guilt" weigh on the German mind that two magazines have been called into existence for the purpose of propaganda. One is called openly *Die Kriegsschuldfrage* ("The War guilt question: Berlin monthly magazine for international enlightenment." Published by the Central Office for Inquiry into

the Causes of the War); the other is *Der Krieg* (War: a political monthly magazine, camouflaged as an anti-war periodical, also published in Berlin). Both contain original articles and translations of foreign articles—by unknown writers—which appear useful as German propaganda. Beyond the fact that such publications exist, they are not of interest to British readers. But to show their nature, one extract will be quoted. *Der Krieg* quotes with approval a suggestion that “British diplomacy” murdered Jaurès, San Giuliano, Karl of Rumania, Witte, and, above all, Pius X, all personages whose influence might have contributed to end the war prematurely.

CAVALRY

Kavallerieverwendung nach den aus der Kriegsgeschichte zu ziehenden Lehren (The employment of cavalry according to lessons that can be derived from military history) is the somewhat cumbrous title of a book by Major W. Brenken, Instructor at the German Cavalry School (Berlin, Eisenschmidt, 7.50 marks), which defends the continued existence of cavalry. His view is that mechanical vehicles, aeroplanes and other new devices may assist and increase the value of cavalry, but cannot replace it altogether.

After surveying shortly the employment of cavalry in the wars before 1914, and finding they “did not throw complete light on the engagement, use and armament of cavalry” in a modern war, he proceeds to give an account of the operations of the German cavalry in 1914–1918.

“Unfortunately,” he says, “the world war did not bring fulfilment of the hopes of the German cavalymen that they would attack and beat the enemy horsemen in a charge. It is deep tragedy that the German cavalry was hardly ever able to use the form of combat with which it was most conversant, and in which it had had the most training in peace—the charge. Our opponents avoided meeting our charges, because they were not equal to us in this sort of fighting. Further, the charges of great bodies of cavalry were deprived of their real objectives; for before the war everybody was convinced of the uselessness of an attack against infantry not already thoroughly shaken. Too little attention was paid to providing the infantry with machine guns, but hardly any to giving them to the cavalry. As the German cavalry, on occasions when it had not merely dismounted cavalry in front of it, tried to charge, there were repulses, for the tic-tac of the machine gun is the funeral song of great charges.”

The main thesis is that the German cavalry was not trained for

the work before it, that its fire-power was inadequate, and that the original distribution and employment of it were most absurd. Germany had ten cavalry divisions, but there could have been more, as four squadrons were attached to each infantry division, when two would have sufficed. Only one cavalry division was allotted to the Russian front, where the strength of the Russian cavalry and the size and nature of the theatre demanded more. The nine in the Western theatre were divided over the front : there were three only on the decisive right wing. Major Brenken, who indulges a good deal in speculation on what might have been, thinks that great success would have been achieved if all nine cavalry divisions had been massed on Kluck's outer flank. The reviewer, having seen the German cavalry shot down at Le Cateau and Néry, inclines to the opinion that had nine instead of three German cavalry divisions appeared there would have been merely greater slaughter of the German horsemen.

The services of the German 8th Cavalry Division in delaying *Rennenkampf* whilst *Samsonov* was being destroyed at *Tannenberg*, and of the I and II Cavalry Corps in covering and extending the German right flank in the *Race to the Sea*, are very properly brought out. The failure of the cavalry to hold back—even seriously delay—the British advance across the two *Morins* and the *Marne* in September, 1914, is not explained. Even in Russia, except in a diversion in *Courland* and *Lithuania*,* during the great *Gorlice-Tarnow* offensive of May, 1915, the German cavalry accomplished nothing of note. It completely failed to complete the ring round *Wilna* in September, 1914, and to stop the escape of the Russian Tenth Army.

The author praises the “decisive” service of the cavalry in *Rumania*, but *Falkenhayn*, who was in command of the German Ninth Army there and himself a cavalryman, has told a different story : he says that the cavalry completely failed him.†

In conclusion, Major Brenken advocates the formation of a cavalry division, well armed with machine guns, and including some infantry battalions in motor wagons or on bicycles, as well as light and heavy artillery, anti-aircraft guns, armoured cars, tanks, aeroplanes and adequate signal services. Such a division would form a

* Fully described in a review of General von Poseck's book on the subject in October, 1924.

† His book was reviewed in April, 1922. He wrote : “Cavalry masses in continuous operations, even with energetic leading, which was here the case, are not materially superior in mobility to the infantry. One might even say, after my experiences in *Rumania*, it is the other way on.”

corps d'élite to bring about a decision, but why call it a cavalry division ?

He says little about reconnaissance and does not mention or consider the employment of cavalry in such theatres as Turkey and Palestine, or differentiate between cavalry and mounted infantry. Nor does he allude to the services of the *Jäger* battalions attached to the German cavalry, which managed somehow or other to keep up with the horsemen ; but the book is a very useful summary.

There are 32 small sketch-maps in colour illustrating clearly the cavalry operations which are mentioned.

REVIEWS AND NOTICES OF RECENT BOOKS AND ARTICLES ON MILITARY SUBJECTS

National Policy and Naval Strength and other Essays. By Vice-Admiral Sir H. W. RICHMOND, K.C.B. Longmans, Green & Co., 39, Paternoster Row, London, E.C.4. 16s. net.

THE fact that Admiral Richmond is the author of a book is in itself a powerful recommendation to all soldiers to read it. But when the book, as this one does, both deals with matters of vital interest to the fighting Services, and explains very clearly their bearing on the problems of defence, one cannot but hope that officers will not only read, but buy and constantly refer to it ; even if " their reputation is that of being one of the worst book-buying classes . . . in a country which has a notoriously poor demand for serious books."

Although there are informing chapters on " Thought and Discussion, The Use of History, The Place of History in Naval Education " (the adjective naval does not reduce the value of the chapter to soldiers), Admiral Richmond's main proposition, which he advances and supports with a wealth of historical fact, is that, unless the three fighting Services all speak the same thing, and are perfectly joined together in the same mind and in the same judgment, we shall " not only be wasting our strength in war, but in all probability our substance in peace in the creation of instruments unsuited to our needs." This danger is especially real because there have for centuries been two main schools of British strategical thought—now there may be three ; and our situation will evidently be dangerous if " those responsible for naval force should make their calculations upon the basis of offensive action on a purely maritime basis, an army upon putting every man into the fighting line on the lines of a continental army and as an adjunct to it in every conceivable circumstance, while an air force bases its war requirements upon conducting an independent war of its own upon the civilian population of the enemy. . . ." For apart from the wastefulness of such procedure, the technical decision, when the Services disagree, must be made by civilians, by men trained in the art of the

possible, that is by men accustomed to clever adjustment and compromise, and compromise always implies weakening of purpose.

There is also another important proposition in this book that can, however, be stated in different terms if looked at from another angle ; and the proposition is, that while in the wars of the last three centuries one of two doctrines of war—the doctrine of the knock-out, and the doctrine of knocking away the props—has usually prevailed, “ the efforts to attain the object—victory—on the lines of that doctrine were definitely weakened by concessions to the other. . . .” Now Great Britain’s main interest in war and peace is, as Admiral Richmond tells us, the maintenance of Naval power and all that depends on it. And, unless Britain was fighting in isolation without allies, this interest could surely best be maintained by dual action ; that is by action on the Continent of Europe on land so as to prevent her principal rivals from gaining territory there that would increase their Naval strength (and to prevent this was one of the commonest causes of war), and by simultaneous action overseas for the purpose both of preserving her own trade and crippling that of her enemies. If this statement is accurate, the only strategical problem was not which doctrine should be followed, which of two paths should be taken, but the distribution of the national forces and resources between them. This distribution, it may be added, was apparently correct during the Seven Years’ War, 1756–1763, for then the British both held the enemy on the Continent and made conquests overseas, which they retained. It was incorrect, or the British did not make the full effort of which they were capable, in the War of the Austrian Succession, 1744–1748, for then the British were obliged to return to France Louisburg, in Cape Breton Island, which had been taken by them, in exchange for Antwerp, which had fallen to the French. And the reason why the younger Pitt has, as Admiral Richmond laments, “ a bad military press,” which quotes Sheridan’s sneer that his military policy was merely one of “ filching sugar islands ” (knocking away the props), is probably because it is thought that he failed adequately to support Britain’s allies on the Continent.

There is another smaller point that must be taken up because it is mentioned both by Lord Sydenham in his foreword, and in the text where it is stated that : “ If the German fleet had been able to delay (in 1914) the arrival of the Expeditionary Force (in France) by blocking the Channel ports of departure and arrival—many of which were undefended—or by other means, the battle of the Marne, the turning-point of the war, would have assumed a different com-

plexion." To speculate on "what might have been is," as pointed out by Admiral Richmond, "only too commonly a barren mental gymnastic. . . ." But would not the taking of so important a measure by the Germans have produced such reactions on the plans of the French that their whole strategy, and therefore the whole course of the early operations on land, might have been altered?

The author has provided an index but no maps, and there seem to be small errors, probably printer's errors, on pages 338, 339, and 351.

Artillery: To-day and To-morrow. By Colonel H. ROWAN-ROBINSON, C.M.G., D.S.O., R.A., *p.s.c.* Wm. Clowes and Sons, Ltd. 5s.

All officers would do well to read what Colonel Rowan-Robinson has written regarding the present and future of his arm of the Service. He may be said to belong to the Fuller school—he regrets that Colonel Fuller is such hard reading—but his conclusions are those of a practical gunner with a proper sense of the value of tradition, a vein of humour, and the habit of clear logical thought.

He begins with a survey of the present military requirements of the Empire and sees reasons why India may hamper the process of complete mechanization of our forces. The first concrete problem considered is that of continuous support—that is the cooperation of artillery and infantry—in the Army of to-day. In the attack Colonel Rowan-Robinson suggests that the gunner should become the predominant partner. "The framework of the attack would be artillery action." In the defence he sees concentrated gun-fire as often "the last winning card in the hands of the commander." Above all he advocates more exercises and training in the cooperation of the two arms.

The successful protection of the other arms against tank attack is held to depend largely upon the employment of artillery in large groups under control from the air. As regards artillery versus tanks in the encounter-battle our present Field Service Regulations are criticized, with the suggestion that the first few days' experience of actual warfare may see the bulk of our tanks kept well forward instead of in rear. The future encounter-battle, which is likely to be one of mechanized forces only, introduces the problem of mechanized artillery. The present dragon-gun is adjudged too vulnerable to be considered seriously, and Colonel Rowan-Robinson thus comes to what he now regards as an old platitude, "the proper antidote to the tank is the tank." The next step is to mount the field gun in a tank, and here the writer sees the 18-pdr. replaced by

the 3-pdr. as being heavy enough for the rôle it will have to play and superior to the former in all other respects.

Next is discussed the possibility of the Royal Tank Corps swallowing the other arms of the Service as the mechanization of the Army progresses. Colonel Rowan-Robinson thinks that the other branches should retain their identity, seeing that they will still have to perform special duties which are closely analogous to their present functions. He prefers to see the Royal Tank Corps form a pool for draft finding, training, and research during the transition period, and is sure that his own Regiment should make no effort to "escape the hard logic of the tank," so far as horse and field artillery are concerned. He quotes Colonel Fuller as proclaiming the gunner the superior soldier of the future, and concludes that the greater part of our mobile artillery will be represented by gun-carrying tanks manned by artillerymen.

Further chapters deal with air control and communications as adapted to the swift-moving battle of the future, the attack of aircraft by artillery, and the possibility of replacing artillery coast-defences by aeroplanes.

To sum up, Colonel Rowan-Robinson emphasizes the present need for closer and more effective cooperation between infantry and artillery and the direction of all intelligence resources within the division to that end. But he envisages the day of battle when the artillery, "metamorphosed perhaps to such a degree as to be hardly recognizable," will be the arbiter. "The 3-pr. displaces the 18-pr., the tank the horse, the aeroplane the O.P., wireless the cable; and artillery, from being an auxiliary arm, becomes suddenly the leading factor on the battle-field."

The Coldstream Guards, 1914-1918. By Lieutenant-Colonel Sir JOHN ROSS-OF-BLADENSBURG, K.C.B., K.C.V.O. Oxford University Press. 2 volumes and map volume. £3 3s. net.

The Coldstream is the last Regiment of the Brigade of Guards to publish its war history, and these volumes, beautifully printed and bound—the Coldstream star reproduced on the covers is a beautiful thing—possess a character and distinction of their own. The method adopted by Sir John Ross-of-Bladensburg is one which no other regimental historian has followed. He has written a more or less comprehensive outline of the World War as waged by the British Empire, expanding his narrative when treating of the Western Front and referring freely to the Official History so far as it is available. The Coldstream battalions are brought into the story from

time to time, pursuing the natural sequence of events, and their achievements in action are described at length. In this way, as in no other, can be shown the scope and character of the tremendous struggle in which the Regiment bore so gallant a part. The danger lies in the tendency for matters of general interest to become paramount ; that Sir John has succeeded in avoiding it may be attributed to the fact that he is a writer of more than ordinary ability imbued with the true Coldstream spirit.

The 2nd and 3rd Battalions of the Regiment were in the 2nd Division and the 1st Battalion in the 1st Division of the British Expeditionary Force, so that the Coldstreamers were hardly engaged with the enemy during the retreat from Mons until the fight at Landrecies. Here the 3rd Battalion bore the brunt in its first engagement since its formation in 1897, and Villers Cottérêts brought it further opportunity for distinction. The 2nd Battalion suffered no casualties until the 7th of September. All three Battalions behaved with great gallantry and suffered heavy loss in the fighting on the Aisne, and again during the epic struggle at " First Ypres " where arose the unique occasion of 1st, 2nd and 3rd—or the survivors thereof—becoming one command. The formation of the Guards Division saw the birth of the 4th Battalion (Pioneers), and thereafter the Coldstreamers bore their full share of the fighting at Loos in 1915 ; at the battles of the Somme in 1916 ; at " Third Ypres " and at Cambrai in the following year ; and during the March and April enemy offensives of 1918, which were eventually succeeded by the allied advance to victory, the Guards Division entering Maubeuge at the time of the Armistice.

In some ways the book may be said to gain in regimental value by reason of its extended outlook upon the war as a whole. Mention of the careers and achievements of Coldstream officers serving in France and elsewhere away from the Regiment is made in the ordinary course of the historical narrative. Thus we read of Colonel J. McNeile, who died at the head of his King's Own Scottish Borderers on the Gallipoli peninsula, and of Sir Stanley Maude, the victor of Baghdad.

Casualties and the arrival of drafts, and the comings and goings of every regimental Coldstream officer, are meticulously recorded. From September, 1915, onwards there is given in the text before every important action a complete order of battle of the Guards Division with a full list of the officers serving with the Coldstream battalions. Periodically, too, appears a list of all officers of the Regiment doing duty on the Western Front and elsewhere, the names

ranging in one instance from Sir Henry Rawlinson, commanding the Fourth Army, to that of a retired Coldstreamer acting as staff officer in a New Zealand military district. So we are shown how every Coldstreamer bore his part, and one cannot forbear to quote the reply of a subaltern of the Regiment when asked by a general what value "Guards' drill" had in the intervals of trench routine and trench-to-trench attacks: "Well, Sir, we must remember that this war is only an incident in the life-history of the Coldstream Guards." Although liable to be misinterpreted, this is surely the complete expression of regimental spirit.

Sir John Ross-of-Bladensburg died in 1926 before the proofs of this history came from the printers, and it is fitting that a short biographical sketch should form an introduction to his work. His public services were many and varied, and among his former writings are a history of the Regiment from Waterloo to 1885 and an account of the Coldstream Guards in the Crimea. The handsome photogravure portrait of the author which serves as frontispiece to the first volume is the only illustration.

The twenty-seven maps partake of the general character of the work inasmuch as they are hardly what one looks for in a regimental history. Several of them show various theatres of operations on a small scale, and there are no battle plans to make clear the actual positions of troops during an action. Apart from a list of officers who served during the years 1914-1918 and an officers' roll of honour, the appendices contain lists of honours and awards including promotions from the ranks and ranging from V.C.'s to "mentions." There is no index.

Armaments Year-Book. Published by the League of Nations at Geneva.

This book contains information regarding the armies of fifty-eight countries, their population, frontiers, expenditure on national defence, production and exchange of goods of importance for national defence, etc. This is the fourth year of publication and recapitulatory tables are published which are full of interest. It is a mine of useful information.

On Future Warfare. By Col. J. F. C. FULLER, C.B.E., D.S.O. Sifton, Praed & Co., Ltd., 67, St. James' Street, London, S.W.1. 12s. 6d. net.

Although it is a pity that he cannot learn the lesson that Aesop taught in the fable of the man with the cloak, no one is better fitted

than Colonel Fuller, either in zeal, ability, versatility, knowledge, or experience, to plead a military cause. And having, as he says, "For just eleven years . . . written and lectured on this subject (mechanization), not that it has been a profitable task ; but I think it has been a worthy one ; and still believing it to be so, I have collected together in this book seventeen lectures and articles. . . ." And the result is a work that broadly may be divided into propaganda, with its inherent limitation of one-sidedness ; forecast ; commentary based on information that is now somewhat out of date ; and revival of the theory—Colonel Fuller calls it strategical paralysis—that was pronounced by the King of Syria, when he commanded his thirty and two captains that had rule over his chariots to fight neither with small nor great save only with the King of Israel, that is to attack the German headquarters not the troops. And although there is not an uninteresting chapter in the book, unless it is the first, which may have been inserted by way of antithesis, Colonel Fuller is certainly at his best in his forecasts and when analysing, as he does in masterly fashion, the problem of tanks in India.

There are, however, several of the author's confident conclusions with which it is not possible to agree. One, for instance, is that the "traditionally-minded soldier . . . impervious to new ideas" was fatally wrong in the past in keeping armament and equipment behind, far behind, invention. But, was he ? It is surely correct to say that the only justification of change in these respects in time of peace is that economy will follow both in peace and in war ; economy of life and economy of resources. So far, at any rate, exactly the opposite has resulted from changes in armament and the means of carrying it. The introduction of the ironclads *Merrimac* and *Monitor* during the Civil War in the United States certainly put all the wooden fleets in the World on the shelf ; but what did the World gain ? The launch of the Dreadnought made every other battleship obsolete, and wiped out in one moment Britain's naval superiority. Was this an advantage ? The actual fact, then, is that if change had not been forced on armies and navies by the progress of civil engineering the late war would have been far less costly than it was. Further, that to introduce a new weapon in time of peace is grossly extravagant unless one is prepared to use it in war before others can produce a similar article. The soldiers of the past, therefore, were profoundly right in their peace policy ; but it is of course evident that the introduction of a new and effective weapon during war may be decisive.

Equally doubtful is Colonel Fuller's suggestion that questions

can be settled as well by painlessly incapacitating the enemy as by killing him. "Had it," he says, "been feasible by . . . some magical means to have compelled Germany to disarm and disband her 5,000,000 soldiers without destroying one of them, then visibly our policy would have been more fully maintained, since our prosperity of 1914 would have been enormously secured." Unfortunately, as the World is constituted at present, there are certain questions that can only be disputed and settled, if at all, by force. Had we, then, used magic to defeat the Germans they would have felt that they had been cheated, not beaten; and a person who thinks that he has been cheated is far more ready again to try conclusions than one who has been knocked insensible.

Colonel Fuller generally delights in leaving the beaten way, and he follows his bent when, in his proposals for organizing the army of the future, he argues from the particular to the general, from the requirement to the means of meeting it; which surely both contravenes the great principle of concentration, in this case of thought, and results in an inelastic force, each part—heavy, light, pursuit, for occupation—being, as in trade union organizations, capable of performing only one function. Perhaps, then, the old method of trying to produce a force the bulk of which was competent to undertake general service was the better one; that is the method of basing organization on one essential group, such as battleships, infantry, or as Colonel Fuller thinks it will be in the future, artillery, and then adding only the ancillary formations that are indispensable.

L'École Militaire. By PIERRE LANLAN. Albert Merancé, Paris.

This is a short history of the great French Military College from its foundation, which was due to the financier Pâris-Duverney and Madame de Pompadour, in 1751. There is also an illustrated description of the famous building.

A History of the Fourth Battalion the Seaforth Highlanders. Compiled by Lieut.-Col. M. M. HALDANE. H. F. & G. Witherby. 21s.

The historian of a battalion has many advantages over the writer who is concerned with larger formations which inevitably demand a more discursive treatment. As Colonel Haldane says, "the battalion is a living thing," and he has been able to present a vivid narrative which should be a source of great pride and satisfaction to all who have any connection with the 4th Seaforth Highlanders.

Its record is a fine one. Amongst the first Territorial battalions to reinforce the British Expeditionary Force, it landed in France in time to participate in the defence of Givenchy, December 1914. Whilst still attached to the Dehra Dun Brigade it was present at Neuve Chapelle, Aubers and Festubert, and at the action of Pi tre during the Battle of Loos. After taking its place in the famous 51st (Highland) Division it fought on the Somme and the Ancre in 1916 ; was at Arras, Ypres, and Cambrai in 1917 ; and during the last year of the war was engaged upon the Somme, the Lys and the Marne (under the French), and in the final victorious advance.

So many personal reminiscences, diaries, and letters have been drawn upon that not only are there first-hand descriptions of most of the actions in which the battalion took part but the life of the unit, in and out of the line, is so well portrayed that even the general reader will be vastly interested. In order that the purely "domestic" narrative shall not be interrupted Colonel Haldane has given, at intervals, a general summary of the progress of the war. This is in smaller type, and serves to provide the setting for the events in which the 4th Seaforths played so gallant a part.

The book opens with a short military history of Ross and Cromarty, in which we see the battalion emerge by stages from the earliest Volunteer days into the Territorial unit which was so soon able to take the field when the Great War came upon us. Later, there are short accounts of the 2nd Line and 3rd Line (4th Reserve) Battalions.

Expert assistance has been secured in preparing the maps, which are consequently above the usual standard of regimental histories, and the numerous reproductions in colour of Captain Finlay Mackinnon's sketches are another distinctive feature. The binding and the whole production are on a very handsome scale, and one only fears that the high price of the book may prevent its entry into the many Scottish homes where it would be so sure of a welcome.

Official History of Australia in the War. Vol. X. : The Australians at Rabaul. By S. S. MACKENZIE. Angus and Robertson, Sydney. Price not stated.

This, the latest volume of the official Australian war history, is as large as any of its predecessors, and recounts the capture and administration of the German possessions in the South Pacific. As may be expected, the naval operations are as important as the military and the administrative portion is more so than either. First is explained how Germany came to acquire territory in this

quarter of the globe—certainly a reproach to the British Government of the time—and the policy which dictated such acquisition. However, it was on the suggestion of the Home Government that Australia undertook the task of seizing the German wireless stations in these waters at the beginning of the Great War, although the Colonial Office was against formal annexation of any of the islands.

The Australian Naval and Military Expeditionary Force was organized after the Commonwealth had promised to raise 20,000 men for service outside Australia. Nevertheless, the expedition, which consisted of six companies of Australian Naval Reserve, one infantry battalion, a machine-gun section and various ancillary units, embarked on the 18th of August, 1914, seven days after the first infantryman had been enrolled. It was then necessary to wait until the Australian squadron returned from escorting a New Zealand force to Samoa before the descent upon German New Guinea could be made, but the first landing, at Herbertshöhe on the island of New Britain, was effected on the 11th of September. We are told that the total of the armed forces in the German protectorate amounted to no more than 61 Germans of all ranks and about 240 native soldiers, so it is not surprising that actual hostilities were short and in some cases consisted of little more than personal encounters. But all are narrated in great detail; and incidentally the author may like to know that Lieutenant Bowen's action during the advance from Herbertshöhe was in no sense a violation of the laws of civilized warfare.

The formal capitulation of German New Guinea occurred on the 17th of September, 1914, at Herbertshöhe, and no trouble was afterwards experienced in occupying the German part of New Guinea itself. The terms of capitulation, which were viewed with much disapproval in Australia where it was thought that unconditional surrender should have been insisted upon, are discussed at length, and the difficulties of Colonel Holmes, commanding the A.N. and M.E.F., in setting up a military administration are fully explained. The occupation of the outlying islands naturally took time, and the North-West Pacific expedition involved the formation of another Australian battalion, known as the "Tropical Force," which was commanded by General Pethebridge. Eventually Pethebridge succeeded Holmes as administrator, and the bulk of the latter's force was withdrawn as being no longer needed in a climate which, at best, was unsuited to white troops.

Most of the remainder of the volume—no inconsiderable portion—describes the Pethebridge administration as regards judicial and

native questions, financial and land problems, trade and commerce. Finally, the Australian "mandate" comes in for lengthy discussion. There is a profusion of illustrations, including many beautiful reproductions of Pacific scenery. The index is on the usual copious scale.

Reputations. By Capt. B. H. LIDDELL HART. Murray. 12s.

Capt. Liddell Hart in his latest book deserts the future for the past, and in the belief that we are now far enough distant from the Great War to avoid prejudice and passion, yet near enough to be able to avail ourselves of the evidence of eye-witnesses and participators of all ranks and stations, has attempted a dispassionate yet living picture of its leading military figures. Certainly his portraits are living enough. He takes two Englishmen, Haig and Allenby (one could wish he had added French); two Americans, Pershing and Liggett; four Frenchmen, Joffre, Foch, Pétain, and Gallieni; and two Germans, Falkenhayn and Ludendorff. Each of these he brings before us in a brief yet lucid, learned yet admirably written essay, which leaves us in no doubt either as to his verdict on its subject or as to his reasons for that verdict. Haig he regards as "the distilled essence of Britain," "the embodiment of her normal virtues and defects," one of the finest defensive generals of all time, yet one who in his offensive enterprises, especially the earlier ones, made grievous and disastrous errors. In arriving at this verdict, Capt. Liddell Hart seems to us to give insufficient credit to Haig for the wonderful offensive campaign of 1918, in which the British army under his command had the lion's share of fighting and of victory. Of Allenby, whose achievements in Palestine were so little foreshadowed by his previous career in the West, our author writes that he "had advanced to meet the new conditions of warfare as Palestine had brought back these new conditions to meet him," so that there followed a military classic which formed at once the last chapter of the old warfare and the preface to the new, as the result of the light that had come to Allenby on the Damascus road.

Pershing, and Liggett, the commander of the 1st American Corps and then of the First American Army, may come next in interest among Capt. Liddell Hart's subjects, if only because one knows so little about them. For Pershing, the "hundred per cent. American," he has only a qualified admiration; he admits his strong personality and driving power, and his great achievement in forming the American army, but blames him for failing to realise the dominance of the machine-gun in modern battle. The sketch of Liggett, a

charming but little-known figure, is delightfully sympathetic and informing—one of the best in the book.

With the Frenchmen Capt. Liddell Hart is on more contentious ground. In the Joffre-Gallieni controversy over their respective shares in the Battle of the Marne, he ardently takes the latter's side : Gallieni, he says, was a military genius without whom the victory would have been impossible ; Joffre, on the other hand, was not a general, but a national nerve sedative. The reader must be referred to the book for the full discussion of this much-disputed question ; the present reviewer's study of it has merely confirmed him in his previous opinion that though Gallieni must be given full credit for seeing and urging his chief to seize the opportunity for the counter-offensive, Joffre cannot be deprived of his share for accepting the heavy responsibility of actually taking the chance offered. In his sketches of Foch and Pétain, Capt. Liddell Hart follows pretty closely the views put forward by Pierrefeu in his " G.O.G." Pétain, the wise and prudent military economist and organizer of victory ; Foch, the soldier by instinct, the incarnation of a resolute determination to attack and conquer, based as much on impulse as on reasoning.

Finally, as regards the Germans, our author thinks but little of Falkenhayn, an able man who ruined his cause by his over-caution and refusal to take calculated risks ; and very highly of Ludendorff, for whom he foresees in the not far distant future a second Napoleonic legend. This seems to us doubtful ; the Napoleonic legend arose partly because the Emperor was something more than a great soldier, which the German was not, and even more because he had that personal magnetism which Ludendorff, by the admission of our author, lacked, and which, even more than the mightiest achievements, is the cause of such apotheosis. For all that, this sketch is no less well worth reading than its fellows.

Capt. Liddell Hart's views, as we have seen, are often disputable ; not so his learning and wide reading. Those who are not *au fait* with the history of the Great War as revealed in recent publications should profit much from this book, and even those who already have some knowledge of its subject will find in it something that is new to them. It is no inconsiderable compliment, and yet a merited one, to say that this latest book is the best that its author has yet given us.

Slaves of the War Lords. By HENRY RUSSELL. Hutchinson. 5s.

This book, one of the many personal narratives now appearing from the pens of men in the ranks, is a good and readable example of its

kind. The author served with a battalion of the Worcester Regiment from the beginning of the winter of 1916 to March, 1918, when he was hit in the shoulder and returned home. He spent all his time in the ranks as a Lewis gunner, and succeeds in conveying to his readers, without heroics and without undue querulousness or complaint, something of what modern war means to the private soldier in a marching regiment. His pages are pleasantly free from the indiscriminate accusations of incompetence, cowardice, self-seeking and callousness against any one and every one above the rank of private, which disfigure so many of these otherwise valuable war diaries. Mr. Russell respected and admired his own officers, and is usually ready to believe that even for things which seemed to him incomprehensible and absurd there may have been in fact good reasons. His quarrel is with war itself, and with those whom he somewhat vaguely terms "the war lords"; yet this quarrel did not prevent him from doing his duty throughout, in whatever circumstances of difficulty and danger. The book may be recommended as giving an admirable picture of the British citizen turned soldier in the greatest of all wars.

Luck's Pendulum. By COLIN DAVY. Messrs. Constable. 7s. 6d.

This is a good sporting novel with plenty of incident. The pendulum swings the right way in the end.

Six British Soldiers. By the Hon. Sir JOHN FORTESCUE. Williams and Norgate. 12s. 6d.

Sir John Fortescue, already within measurable distance of the completion of his great history of the British Army, has followed up his anthology of episodes from our military history, published last year under the title of "The Gallant Company," with a second volume containing brief biographies of six of our greatest generals of the past—Cromwell, Marlborough, Wellington, Abercromby, Stuart and Moore. Of these the first three, so to speak, select themselves; and the careers of their less well-known companions, as narrated here, certainly deserve something better than oblivion. Nevertheless the author's choice of them seems curious, and the reasons for it, as given by him, hardly explain it adequately. His purpose, he tells us, is "to show the efforts of six typical British soldiers alike in making armies and in dictating a military policy." Cromwell certainly made the New Model Army; Moore was "the very best trainer of troops we have ever possessed"; and Marlborough practically dictated our military policy during the War of

the Spanish Succession. But Abercromby, an admirable soldier, was unfortunate enough to have to bear "the brunt of evil years of false military policy" which he had no chance of reforming or amending; Charles Stuart's "actual exploits were few"; and Wellington's greatness lay primarily in the fields of strategy and tactics. Indeed, the qualities required by the administrator or organizer of armies are not necessarily those of a great general; such men, for example, as Carnot or McClellan were well able to make an army but not so well able to use it, and the two British Commanders-in-Chief, whom Sir John Fortescue esteems the best in our history, Cumberland and York, were both conspicuous failures in the field.

Regarded as biography, the book is, as one would expect, excellent. Of his three greatest figures, Sir John has, of course, and indeed can have, little new to say, but his sketches are adequate, judicious and eminently readable. Of the others, he does full justice to Abercromby, perhaps of all his heroes the most admirable as a man, and a soldier to whom history has not always paid the tribute due; and perhaps something more than justice to Stuart, whose merits were those of promise rather than performance, and to Moore, whose performances in the field, viewed dispassionately, hardly seem worthy of his high reputation. An introduction, replete with learning and the fruit of wide reading, stresses the peculiar difficulties under which British generals have had to labour, and casts some interesting lights on our military life in past times. It encourages us to hope that the author will shortly give us—if he will pardon the suggestion—a general sketch of the daily life and character of the British soldier throughout history; such a book would be worth writing, and there is no man who could do it so well.

The King's Regiment (Liverpool), 1914-1919. By EVERARD WYRALL. Vol. I, 1914-15. Edward Arnold & Co. 7s. 6d.

The difficulties which beset the issue of adequate war histories of our Line Regiments are amply illustrated by this volume. Its price may be regarded as the absolute minimum, yet so many battalions of the King's went on active service during the first seventeen months of the Great War that the narrative can here be carried no further than December, 1915. Two more volumes will be necessary to complete the work, so that those who have served in the King's, and the many friends of this fine Regiment, who wish to possess all three, will find themselves committed to a considerable outlay.

The 1st Battalion of the King's was in the 2nd Division, and

thus took part in the Retreat from Mons, the battles of the Marne and the Aisne, and in "First Ypres." The 2nd Battalion remained in India throughout the War. In another respect the Regiment has a record that is, perhaps, unique: all its first-line Territorial battalions, the 5th, 6th, 7th, 8th, 9th and 10th, were soon sent to France independently for attachment to Regular brigades, as was its extra Special Reserve battalion, the 4th.

After following the fortunes of the 1st Battalion from Mons to Ypres there are described the various battles of 1915 and the part played in them by the various battalions, Regular, Territorial and New Army. It is a proud story, for the King's Regiment was represented in practically every action, great and small, during this period. Mr. Wyrall shows himself as painstaking as ever in transcribing from the battalion war diaries and explaining the whole scope of the operations by quotation from the despatches and from the Official History. But the real value of the narrative is to be found in the extracts from the diaries and letters of officers and others, such assistance from the actual participants in events having been freely given.

Incidentally, it is a pity that Mr. Wyrall should describe trenches by means of letters and numbers which, in the absence of a map, convey nothing to the reader. Also it is disappointing to find such scant attention paid to the raising of the Service battalions—including the famous "Pals"—for the recruiting results achieved are a source of legitimate pride to the citizens of Liverpool and all lovers of the Regiment. No less than eight New Army battalions of the King's went overseas before the end of 1915. One is impelled to ask why it is "impossible to write with accuracy" of the number of battalions of the Regiment raised and in training after one year of war.

Sir Charles Harrington, Colonel of the Regiment, contributes an introduction. There are two excellent photographs of the 10th King's (Liverpool Scottish) in action at Bellewaarde, and a reproduction of Colonel Granville Baker's picture showing Lance-Corporal Tombs of the 1st Battalion winning the Victoria Cross. A list of the fallen includes all ranks of all battalions up to the end of 1915—a very commendable feature.

The War in the Air. Vol. II. By H. A. JONES. Oxford: The Clarendon Press. 17s. 6d. net.

After many vicissitudes and an interval of six years we have before us the second volume of "The War in the Air."

The first volume,* a classic, was written by Sir Watler Raleigh, who died as the result of an illness contracted in Iraq, where he was studying on the spot the work of the Royal Air Force in the East. His task was taken up by the late Dr. D. G. Hogarth, but the latter, owing to ill-health and other causes which need not here be examined, found himself unable to publish the results of his labour.

For a considerable period following the resignation of Dr. Hogarth the historical future of the "War in the Air" was in doubt. In the issue, however, the task was accepted by Mr. H. A. Jones, who is thoroughly at home in the detail of the war in the air. As head of the Air Historical Section he had prepared the data both for Sir Walter Raleigh and for Dr. Hogarth. With the war work of the Flying Services there is no one more familiar than Mr. Jones.

Broadly speaking, Sir Walter Raleigh covered the history of flight from earliest times; the inception and growth of the R.F.C. and R.N.A.S.; the outbreak of war; the part played by the R.F.C. and R.N.A.S. in 1914; and, finally, the plans then existing for expansion.

In Volume II, Mr. Jones opens with the Dardanelles Campaign; he then takes us through the war in France from early 1915 to the end of the Somme Battles in 1916; he concludes with an account of naval aviation covering the same two years.

In the Dardanelles we are once more confronted with the inadequacy of our air resources side by side with the possibilities of modern air power in the same situation to-day. As we have said before,† there is no doubt that modern air forces based on the Island of Imbros could have severed the Turkish communications and isolated their armies on the toe of the Peninsula.

Sir Ian Hamilton tells us that the "demnition total" of his aircraft worked out at five serviceable machines, a laughable figure at which to start a campaign under modern conditions; particularly so when it is realized that Sir Ian was fully alive to the bombing possibilities of aircraft on the Peninsula. He tells us (p. 111, Vol. I, "Gallipoli Diary") that "if we had only a bombing force at our disposal, the Gallipoli Peninsula, being a very limited space with only one road and two or three harbours on it, could probably be made untenable." Commander Samson estimated that with fifty-four aircraft he could have made the Peninsula untenable; this is probably an exaggeration, but it is interesting as a might-have-been.

* See *Army Quarterly*, Vol. V, No. 1, October, 1922.

† *Army Quarterly*, Vol. V, No. 1, October, 1922. *Aviation in Peace and War*, Maj.-General Sir F. H. Sykes.

However, an adequate supply of aircraft at Gallipoli was not to be. Sir Ian Hamilton blames the feud between the War Office and the Admiralty (p. 287, Vol. I, "Gallipoli Diary"), the same feud that subsequently led to the formation of the Royal Air Force.

Of these things Mr. Jones does not tell us ; nor does he mention Lord Kitchener's categorical refusal of General Braithwaite's request for more aircraft (p. 8, Vol. I, "Gallipoli Diary"). The author gives us the impression in his chapter on the Dardanelles that he is confining himself to fighting facts at the expense of higher policy, a factor which cannot be ignored by the student of the campaign or the student of air power.

The narrative of the war in France during 1915 and 1916 is of engrossing interest. In many ways these were the most interesting years of the Royal Flying Corps, when it passed from childhood to puberty. The author misses no point and takes us step by step through the development of wireless, of photography, of contact patrol, of bombing and of fighting. By him we are reminded not only of our own growing pains but of those of the enemy. From him we learn of the truly remarkable foresight of Sir Hugh Trenchard, and of the little less remarkable General von Hoeppner who took over the German Air Services from Colonel Thomsen at their blackest period in October, 1916. The story of our unique air superiority on the Somme from July to September, its gradual decline and final equality is of immense interest to the student of air strategy ; particularly the lesson that mechanism governs all save the personal factor—and that, too, if carried to an extreme.

Here and there the author is guilty of some minor inaccuracies, somewhat unexpected in an official history. He is wrong in suggesting that the La Boisselle mine-craters existed in June, 1916. Again, he reveals some confusion of thought concerning contact patrol when he tells us that "as the value of the contact reports would depend on timely receipt by the commands concerned, each corps or divisional headquarters had a wireless receiving station to take in urgent messages." Corps or Divisions did have such stations, but not to receive contact patrol reports ; contact aircraft did not carry wireless until 1918.

If we may make one other comment, we think Mr. Jones devotes too much space to his description of the ground fighting on the Somme. He must give the reader credit for some knowledge of the main factor in the war and, on that assumption, confine himself more to the facts at issue.

Of the growth of naval aviation the author tells a most interesting

story well. Here we are taken through the anti-submarine campaign ; the development of balloons at sea ; airships small and large ; registration of ships' guns ; raids on airship sheds and all the ingenious attacks which kept busy the brain of the Admiralty.

Aircraft at Jutland makes pathetic reading.

With the conclusion of Volume II the author is still on the fringe of air power. He has yet to tell us of the war in the East ; of Home Defence and of the Independent Air Force, not to mention the last two years in France and at sea.

It is no small task for any author, however able, to take up the pen of Sir Walter Raleigh, but if he continues as he has begun we can look forward to much that is instructive from Sir Walter's successor.

Admiral Byng and the Loss of Minorca. By BRIAN TUNSTALL,
Lecturer in History at the Royal Naval College, Greenwich.
Philip Allan & Co., Quality House, Great Russell Street,
W.C.1. Price 16s. net.

When the College of Imperial Defence was first established it was announced in Parliament that one reason for doing so was to enable soldiers, sailors and airmen to understand something of what their colleagues in the other services could or could not do ; but, as some one aptly remarked, nothing apparently was to be done to enable them in time of war to understand what the politicians could do. Mr. Tunstall, however, has now admirably provided the necessary information as regards the unregenerate past in this book, which possesses the additional advantage of enabling its readers to see how the minds of those men worked whose decisions were instrumental in producing the events.

Historians in general are naturally inclined to deal rather with the successful than, as is done by Mr. Tunstall, with the unsuccessful operations. Yet the latter are in fact frequently more instructive, for while on the one hand success always seems after the event to have been easy, on the other it has rarely been perfect. The student may therefore be induced both to underrate difficulties and, because he can recognize the errors of the great, to form an opinion of his own capacity which is probably as false as it is favourable. But any one, however self-confident, who reads this volume can hardly fail to ask himself seriously and often what decisions he would have made had he been placed—and war abounds in similar dilemmas—in the situations in which Admiral Byng and General Fowke found themselves ; and also to ask himself whether the alternatives

suggested by the author would in every case have been practicable. And a book that gives such food for thought is unquestionably one that provides a valuable means both of getting "experience" and of training judgment. Apart from the main theme there are many items of interesting information, such as that even in those days a "storekeeper" could rise to be a full general, and that, before the battle of Minorca, Byng paced the quarter-deck "carrying a copy of the Fighting Instructions so that he might be certain of fighting his first fleet action according to regulation."

Some Aspects of Mechanization. By Colonel H. ROWAN-ROBINSON, C.M.G., D.S.O., R.A., *p.s.c.* Wm. Clowes and Sons, Ltd. 3s. 6d. net.

Soldiers who are striving to keep abreast of modern developments can hardly avoid reading Colonel Rowan-Robinson. He is in the van of the bold practical thinkers who not only believe in the efficient mechanized army of the future, but have logical, clear-cut ideas as to how it is best to work up to this ideal. Most of the material for this little book comes from his articles published in the *Army, Navy and Air Force Gazette*, but a goodly portion of the chapter on the defensive in mechanized warfare and of that on reconnaissance and protection is derived from a contribution to the January, 1927, number of the *Army Quarterly*.

The author uses as a basis the reports of the work done by the Experimental Armoured Force, which he rightly regards as still at an experimental stage, and points out that its performances in peace manœuvres cannot be otherwise than inconclusive. His views on the value, and inevitability, of command from the air are well known. In the defensive he can only see his mechanized force as mobile and aggressive, avoiding the occupation of a position as we define the phrase at present. As regards reconnaissance, our latter-day "mildly mechanized" cavalry is said to have doubled its value; and here again distant reconnoitring and protection detachments, whose functions are more important than ever they were, must be controlled from the air. The same method is also recommended for umpiring at manœuvres.

In another chapter is discussed the ideal system of combining fire power, mobility and protection, and Colonel Rowan-Robinson, as a believer in the ultimate decisive "tank-to-tank battle," again advocates that the 3-pdr. should supplant the 18-pdr. field gun.

Finally is considered the question of India and mechanization. One must agree that it is difficult to overrate the importance of this

problem, for the very existence of the Cardwell system is involved. An excellent argument is made out for mechanizing the British, as distinct from the native, portion of our forces in India.

Reminiscences. By Col. R. E. CROMPTON, C.B., R.E. Constable.

14s.

In this short volume Col. Crompton describes in brief outline a very varied career, commencing with the Crimean War, in which he served as a midshipman, and closing with his share in designing the tanks which did so much to win the Great War. The larger part of his book, however, is taken up with a description of his work as a civil engineer, when he was well in the van of every movement for improvement of modern conditions of life. He devised a system of steam road trains which might well have revolutionized transportation in India had it been generally adopted; he was among the pioneers of electrical engineering in England, and later introduced it into Vienna (where he had an amusing but embarrassing adventure with the lively young women of the *corps de ballet* at the Opera); he was one of the first exponents of the safety bicycle, a pioneer motorist, and an authority on the construction of roads suitable for motor traffic. Into the midst of all these varied activities he sandwiched some excellent service in the Boer War, where he commanded an Electrical Engineer unit—the first one ever to take the field as part of a British army—beat off a Boer attack on a bridge construction train at Leeuwspruit, where he won his C.B., and was later appointed Director of Mechanical Transport at Pretoria. Col. Crompton tells his story lucidly, modestly, and with a sense of quiet humour which makes his book, despite the wealth of technical matter contained in it, easy and pleasant to read. His long and honourable career may stand as an example of that alliance of military and industrial ability so necessary in these days of specialized mechanical warfare, and it is to be hoped that the mechanized British army of the future will find many such as he to help it over its difficulties.

ARTICLES IN REVIEWS

The Nineteenth Century and After, July, 1928. (1) "The Occupation of the Rhineland : a Personal Survey," by Major B. T. Reynolds, M.C.

(2) "Memories of 1914-1918 : V. Spring in Picardy," by C. O. G. Douie.

The Quarterly Review, July, 1928. (1) "Sir Henry Wilson," by Sir Andrew MacPhail.

This article reviews the *Life and Diaries*, by Major-General Sir C. E. Callwell, K.C.B. ; and is certainly one which invites considerable comment.

(2) "The Soldier's Faith," by E. M. E. Blyth.

A review of *Religio Militis*, by Austin Hopkinson, formerly a private of Dragoons.

The Fortnightly Review, August, 1928. "Curzon and Kitchener : some personal reminiscences," by Major-General Sir Wilfrid Malleon, K.C.I.E.

The Nineteenth Century and After, August, 1928. "Memories of 1914-1918 : VI. Fighting on the Ancre," by C. O. G. Douie.

LIST OF BOOKS RECEIVED

"A. & Q. or Military Administration in War." By Lieut.-Colonel W. G. Lindsell, D.S.O., O.B.E., M.C., *p.s.c.*, R.A. Published by Gale & Polden, Ltd. 7s. 6d.

"A Private in The Guards." By Stephen Graham. Published by William Heinemann, Ltd. 3s. 6d. net.

"Kavallerieverwendung nach den aus der Kriegsgeschichte zu ziehenden Lehren." By W. Brenken. Published by R. Eisenschmidt. Berlin. Price 9 Marks. (Maps 7.50 Marks.)

"The War in The Air. Being the Story of the part played in the Great War by the Royal Air Force." Vol. II. By H. A. Jones. Published by the Oxford University Press. Price 17s. 6d. net.

League of Nations "Armaments Year Book." Issued by League of Nations Information Section. Room 197. Geneva.

- "India." Vol. I. Published by India Publications, Ltd. 6d.
- "The King's Regiment (Liverpool), 1914-1919." Vol. I. 1914-1915. By Everard Wyrall. Published by E. Arnold & Co. 7s. 6d. net.
- "Luck's Pendulum." By Colin Davy. Published by Constable. 7s. 6d. net.
- "Six British Soldiers." By The Hon. Sir John Fortescue. Published by Williams and Norgate, Ltd. 12s. 6d. net.
- "Imperial War Museum. II. Annual Report, 1927-1928." Produced by Order of the Trustees. Published by His Majesty's Stationery Office. 1s. net.
- "Some Military Conversations and Official Communications in French." 2nd Edition. Edited by Lieut.-Col. J. H. Gettins, D.S.O. Published by Gale & Polden, Ltd. 3s. net.
- "The History of the Suffolk Regiment, 1914-1927." By Lieut.-Col. C. C. R. Murphy. Published by Hutchinson & Co., Ltd. 30s. net.
- "Foreign Legionaries in the Liberation of Spanish South America." By Alfred Hasbrouck. Issued by P. S. King & Son. 27s.
- "Admiral Byng and the Loss of Minorca." By Brian Tunstall. Published by Philip Allan & Co., Ltd. 16s. net.
- "Oddities." By R. T. Gould. Published by Philip Allan & Co., Ltd. 12s. net.
- "Leave me with a Smile." By Elliot White Springs. Published by William Heinemann, Ltd. 7s. 6d. net.
- "Some Aspects of Mechanization." By Colonel H. Rowan-Robinson, C.M.G., D.S.O., R.A., *p.s.c.* Published by William Clowes & Sons, Ltd. 3s. 6d. net.
- "The Murmansk Venture." By Major-General Sir C. Maynard. Published by Hodder & Stoughton. 20s. net.
- "Deutsch - Englisches. Englisch - Deutsches. *Militär-Wörterbuch.* By Studienrat Kurt Hilmar Eitzen. Published by Verlag "Offene Worte," Berlin. W. 10. 8 Reichmarks.
- "Warriors Still at Ease." By Anthony Armstrong. Published by Methuen & Son., Ltd. 3s. 6d. net.

APPENDIX

[*Supplied from official sources with the permission of the Controller of His Majesty's Stationery Office.*]

I. THE ARMY

1. ARMY COUNCIL

- The Rt. Hon. Sir Laming Worthington-Evans, Bart., G.B.E., M.P.,
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<i>Director-General of the Territorial Army.</i>	Lieutenant-General Sir Reginald B. Stephens, K.C.B., C.M.G., <i>p.s.c.</i>
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Chaplain-General. Rev. A. C. E. Jarvis, C.M.G., M.C., D.D.

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1st Air Defence Brigade. Brigadier E. F. Shewell, C.M.G., D.S.O.
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2nd Infantry Brigade. Brigadier A. J. McCulloch, D.S.O., D.C.M., *p.s.c.*
3rd Infantry Brigade. Brigadier G. Thorpe, C.M.G., D.S.O., *p.s.c.*
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2nd Division. Major-General T. A. Cubitt, C.B., C.M.G., D.S.O., *p.s.c.*
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6th Infantry Brigade. Brigadier R. D. F. Oldman, C.B., C.M.G., D.S.O., A.D.C.
C.R.A. 2nd Division. Brigadier W. Stirling, C.M.G., D.S.O.

B.—EASTERN COMMAND

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<i>Brigadier, General Staff.</i>	Brigadier Sir H. J. Elles, K.C.M.G., C.B., D.S.O., <i>p.s.c.</i> , A.D.C.
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<i>10th Infantry Brigade.</i>	Brigadier T. W. Stansfeld, C.M.G., D.S.O.
<i>11th Infantry Brigade.</i>	Brigadier W. J. N. Cooks-Collis, C.B., C.M.G., D.S.O.
<i>12th Infantry Brigade.</i>	Brigadier E. B. Hankey, C.B., D.S.O.
<i>C.R.A. 4th Division.</i>	Brigadier V. Asser, C.M.G., D.S.O.
<i>54th (East Anglian) Division.</i>	Major-General Sir T. G. Matheson, K.C.B., C.M.G.
<i>161st (Essex) Infantry Brigade.</i>	Colonel Sir F. Carne, Bt., T.A.
<i>162nd (East Midland) Infantry Brigade.</i>	Colonel Sir H. Wake, Bt., C.M.G., D.S.O., <i>p.s.c.</i>
<i>163rd (Norfolk and Suffolk) Infantry Brigade.</i>	Colonel R. S. Allen, D.S.O., <i>p.s.c.</i>
<i>C.R.A. 54th Division.</i>	Colonel O. M. Harris, D.S.O.
<i>44th (Home Counties) Division.</i>	Major-General A. G. Wauchope, C.B., C.M.G., C.I.E., D.S.O.
<i>131st (Surrey) Infantry Brigade.</i>	Colonel the Lord Roundway, C.M.G., D.S.O., M.V.O.
<i>132nd (Middlesex and Sussex) Infantry Brigade.</i>	Colonel H. C. W. H. Wortham, C.M.G., D.S.O.
<i>133rd (Kent and Sussex) Infantry Brigade.</i>	Colonel H. E. R. R. Braine, C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 44th Division.</i>	Colonel M. Crofton, D.S.O.

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<i>General Staff Officer 2nd Grade.</i>	Major A. F. Smith, D.S.O., M.C., <i>p.s.c.</i>
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<i>56th (1st London) Division.</i>	Major-General H. Isacke, C.B., C.S.I., C.M.G., <i>p.s.c.</i>
<i>167th (1st London) Infantry Brigade.</i>	Colonel F. G. Alston, C.M.G., D.S.O.
<i>168th (2nd London) Infantry Brigade.</i>	Colonel P. R. O. A. Simner, D.S.O., T.A.

C.—LONDON DISTRICT—*continued*

169th (3rd London) Infantry Brigade.	Colonel Lord H. C. Seymoor, D.S.O.
C.R.A. 56th (1st London) Division.	Colonel C. W. W. McLean, C.M.G., D.S.O.
27th (London) Air Defence Brigade	Colonel C. Buckle, C.B.E., T.A.
47th (2nd London) Division.	Major-General L. C. L. Oldfield, C.B., C.M.G., D.S.O.
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142nd (6th London) Infantry Brigade.	Colonel T. R. C. Price, C.M.G., D.S.O., <i>p.s.c.</i>
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5th Cavalry Brigade.	Colonel P. J. V. Kelly, C.M.G., D.S.O.
6th Cavalry Brigade.	Colonel M. Graham, D.S.O., <i>p.s.c.</i>
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149th (Northumberland) Infantry Brigade.	Colonel W. St. A. Warde-Aldam, D.S.O.
150th (York and Durham) Infantry Brigade.	Colonel O. H. Delano-Osborne, C.M.G., <i>p.s.c.</i>
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C.R.A. 50th (Northumbrian) Division.	Colonel O. C. Niven, D.S.O.
49th (The West Riding) Division.	Major-General N. J. G. Cameron, C.B., C.M.G., <i>p.s.c.</i>
146th (1st West Riding) Infantry Brigade.	Colonel M. R. Walsh, C.M.G., M.C., <i>p.s.c.</i>
147th (2nd West Riding)	Colonel A. E. Irvine, C.B., C.M.G., D.S.O.
148th (3rd West Riding) Infantry Brigade.	Colonel D. S. Branson, D.S.O., M.C., T.D., T.A.
C.R.A. 49th (The West Riding) Division.	Colonel K. G. Campbell, D.S.O.
46th (The North Midland) Division.	Major-General Sir P. O. Hambro, K.B.E., C.B., C.M.G., <i>p.s.c.</i>

D.—NORTHERN COMMAND—*continued*

- 137th (Staffordshire) Colonel H. Clive, O.B.E., T.D., T.A.
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- 138th (Lincolnshire and Colonel G. H. Martin, C.M.G., D.S.O.,
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Brigade.
- 139th (Sherwood Foresters) Colonel J. Harington, C.B., C.M.G., D.S.O.
Infantry Brigade.
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 land) *Division.*

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Grade.

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ministration. D.S.O.
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 K.C.M.G., C.B., M.C.
- 152nd (Seaforth and Colonel J. K. Dick-Cunyngham, C.M.G.,
 Cameron) *Infantry* D.S.O., *p.s.c.*
Brigade.
- 153rd (Black Watch and Colonel Sir J. L. G. Burnett of Leys, Bart.,
 Gordon) *Infantry* C.M.G., D.S.O.
Brigade.
- 154th (Argyll and Sutherland Colonel Sir N. A. Orr-Ewing, Bart., D.S.O.
Infantry Brigade.
- C.R.A. 51st (The High- Colonel C. B. Clark, D.S.O.
 land) *Division.*
- 52nd (Lowland) *Division.* Major-General H. F. Thuillier, C.B.,
 C.M.G.
- 155th (East Scottish) Colonel S. H. Eden, C.M.G., D.S.O.
Infantry Brigade.
- 156th (West Scottish) Colonel W. Allason, D.S.O.
Infantry Brigade.
- 157th (Highland Light Colonel R. W. Morgan, C.M.G., D.S.O.
 Infantry) *Infantry*
Brigade.
- C.R.A. 52nd (The Low- Colonel A. M. Duthie, D.S.O., O.B.E.
 land *Division*).

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<i>8th Infantry Brigade.</i>	Brigadier C. J. C. Grant, D.S.O., <i>p.s.c.</i>
<i>9th Infantry Brigade.</i>	Brigadier G. W. Howard, C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 3rd Division.</i>	Brigadier R. G. Finlayson, C.M.G., D.S.O., <i>p.s.c.</i>
<i>48th (South Midland) Division.</i>	Major-General T. T. Pitman, C.B., C.M.G.
<i>143rd (Warwickshire) Infantry Brigade.</i>	Colonel R. S. Popham, C.M.G., D.S.O.
<i>144th (Gloucestershire and Worcs.) Infantry Brigade.</i>	Colonel H. D. Buchanan-Dunlop, C.M.G., D.S.O.
<i>145th (South Midland) Infantry Brigade.</i>	Colonel E. R. Clayton, C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 48th (South Midland) Division.</i>	Colonel R. W. N. Bouchier, D.S.O.
<i>43rd (Wessex) Division.</i>	Major-General Sir G. D. Jeffreys, K.C.V.O., C.B., C.M.G.
<i>128th (Hampshire) Infantry Bgde.</i>	Colonel E. G. St. Aubyn, D.S.O., T.A.
<i>129th (South Wessex) Infantry Brigade.</i>	Colonel J. E. Gibbs, M.C.
<i>130th (Devon and Cornwall) Infantry Brigade.</i>	Colonel A. B. Incedon-Webber, C.M.G., D.S.O.
<i>C.R.A., 43rd (Wessex) Division.</i>	Colonel W. D. Stillwell, D.S.O.

H.—WESTERN COMMAND

<i>General Officer Commanding-in-Chief.</i>	Lieutenant-General Sir C. F. Romer, K.B.E., C.B., C.M.G., <i>p.s.c.</i>
<i>General Staff Officer, 1st Grade.</i>	Colonel R. N. Dick, C.M.G., D.S.O., <i>p.s.c.</i>
<i>Brigadier in charge of Administration.</i>	Brigadier R. F. A. Hobbs, C.M.G., D.S.O., <i>p.s.c.</i>
<i>53rd (Welsh) Division.</i>	Major-General C. P. Deedes, C.B., C.M.G., D.S.O., <i>p.s.c.</i>

H.—WESTERN COMMAND—*continued*

158th (Royal Welch) Infantry Brigade.	Colonel C. C. Norman, C.M.G., D.S.O.
159th (Welsh Border) Infantry Brigade.	Colonel C. S. Owen, C.M.G., D.S.O.
160th (South Wales) Infantry Brigade.	Colonel D. H. Leslie, T.A.
C.R.A. 53rd (Welsh) Division.	Colonel N. G. M. Jervis, D.S.O.
55th (West Lancashire) Division.	Major-General H. W. Higginson, C.B., D.S.O.
164th (North Lancashire) Infantry Brigade.	Colonel F. H. Dansey, C.M.G., D.S.O.
165th (Liverpool) Infantry Brigade.	Colonel M. O. Clarke, D.S.O., <i>p.s.c.</i>
166th (South Lancashire and Cheshire) Infantry Brigade.	Colonel M. G. Taylor, C.M.G., D.S.O., <i>p.s.c.</i>
C.R.A. 55th (West Lancashire) Division.	Colonel D. J. C. E. Sherlock, D.S.O.
42nd (East Lancashire) Division.	Major-General C. H. D. Moore, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
125th (Lancashire Fusiliers) Brigade.	Colonel B. D. L. G. Anley, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
126th (East Lancashire and Border) Infantry Bgde.	Colonel G. D. Jebb, C.M.G., C.B.E., D.S.O., <i>p.s.c.</i>
127th (Manchester) Infantry Brigade.	Colonel A. H. Spooner, C.M.G., D.S.O.
C.R.A. 42nd (East Lancashire) Division.	Colonel H. de C. Martelli, C.B., D.S.O., <i>p.s.c.</i>

J.—CHANNEL ISLANDS

Guernsey and Alderney District :

<i>Lt.-Governor and Commanding the Troops.</i>	Major-General the Lord Sackville, K.B.E., C.B., C.M.G., <i>p.s.c.</i>
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Jersey District :

<i>Lt.-Governor and Commanding the Troops.</i>	Major-General Hon. Sir F. R. Bingham, K.C.B., K.C.M.G.
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4. DISTRIBUTION OF REGULAR UNITS OF THE ARMY

A.—Cavalry Regiments

Regiment.	Station.	Commanding Officer.	Remarks.
The Life Guards	Regent's Park	Lt.-Col. Hon. G. V. A. Monckton - Arundel, D.S.O., O.B.E.	
Royal Horse Guards (The Blues)	Windsor	Lt.-Col. Lord A. R. Innes-Ker, D.S.O.	
1st King's Dragoon Guards	Aldershot	Lt.-Col. W. F. Chappell, D.S.O.	
The Queen's Bays (2nd Dragoon Gds.)	Tidworth	Lt.-Col. R. H. Osborne, D.S.O., M.C., <i>p.s.c.</i>	
3rd-6th Dragoon Guards	Tidworth	Lt.-Col. F. W. Bullock Marsham, D.S.O., M.C., <i>p.s.c.</i>	
4th-7th Dragoon Guards	Sialkot	Lt.-Col. E. M. Dorman, D.S.O., M.C.	
5th Inniskilling Dragoon Guards	Risalpur (for York)	Lt.-Col. J. A. Brooke.	
1st The Royal Dragoons	Egypt	Lt.-Col. E. W. T. Miles, M.C.	
The Royal Scots Greys (2nd Dragoons)	Edinburgh	Lt.-Col. J. J. Readman, D.S.O.	
3rd The King's Own Hussars	Lucknow	Lt.-Col. F. R. Burnside, D.S.O.	
4th Queen's Own Hussars	Meerut	Lt.-Col. H. E. Macfarlane, D.S.O., M.C., <i>p.s.c.</i>	
7th Queen's Own Hussars	Colchester	Lt.-Col. T. A. Thornton	
8th King's Royal Irish Hussars	Rhine	Lt.-Col. H. L. Jones, D.S.O., <i>p.s.c.</i>	
9th Queen's Royal Lancers	Bolarum	Lt.-Col. G. F. Reynolds, M.C., <i>p.s.c.</i>	
10th Royal Hussars (Prince of Wales's Own)	Egypt	Lt.-Col. V. J. Greenwood, M.C.	
11th Hussars (Prince Albert's Own)	Aldershot	Lt.-Col. F. H. Sutton, M.C.	
12th Royal Lancers (Prince of Wales's)	Egypt	Lt.-Col. H. V. S. Charrington, M.C., <i>p.s.c.</i>	
13th-18th Hussars	Shorncliffe	Lt.-Col. W. Holdsworth.	
14th-20th Hussars	Aldershot	Lt.-Col. F. B. Hurn-dall, M.C., <i>p.s.c.</i>	
15th-19th Hussars	Egypt (for Risalpur)	Lt.-Col. J. Godman.	
16th-5th Lancers	Tidworth	Lt.-Col. G. F. H. Brooke, D.S.O., M.C., <i>p.s.c.</i>	
17th-21st Lancers	Hounslow	Lt.-Col. V. N. Lockett.	

B.—Royal Regiment of Artillery

Stations of Units.

Brigades, Royal Horse Artillery.

Brig.	H.Q. and Batteries.	—	Brig.	H.Q. and Batteries.	—
1	H.-Q. A, B O	Aldershot	3 (ctd).	D E G	Trowbridge Risalpur Meerut
2	H.-Q. K C L	Aldershot Egypt	Unbrig.	N I M	Sialkot Trimulgherry St. John's Wood
3	H.-Q. J, F	Newport (Mon.)			

Field Brigades, Royal Artillery.

1	H. Q. 11 (H), 52, 80 (H) 98	Kirkee Trimulgherry	16	H.-Q. 34, 72, 86 (H) 27 (H)	Jhansi Allahabad
2	H.-Q. 35 (H) 42, 53, 87	Larkhill	17	H.-Q. 10 13, 26, 92 (H)	Colchester
3	H.-Q. 18, 62, 65 (H) 75	Exeter Bristol	18	H.-Q. 93, 94, 95 (H) 59	Woolwich
4	H.-Q. 4 (H), 7 14, 66	Aldershot	19	H.-Q. 29 (H) 96, 97 39	Wiesbaden Larkhill Catterick
5	H.-Q. 63, 64, 73, 81 (H)	Shorncliffe	20	H.-Q. 41, 45 (H) 67, 99	
6	H.-Q. 69, 74, 77, 79 (H)	Bulford (for Bordon)	21	H.-Q. Z. P Q (H) Y	Newcastle Sheffield Sheffield Newcastle
7	H.-Q. 9, 17, 16, 43 (H)	Bordon	22	H.-Q. 33, 36 (H) 55 (H) 32	Rawalpindi Campbellpore
8	H.-Q. H (H) V, W, X	Brighton	23	H.-Q. 60, 89, 90 (H) 100 (H)	Nowshera (for Jub- bulpore & Nasir- warabad)
9 (Army)	H.-Q. 19, 20, 28, 76 (H)	Bulford	24	H.-Q. 70, 50, 56 (H) 22	Lucknow, Fyza- bad and Cawnpore
10 (Army)	H.-Q. 51, 54 30 (H), 46	Deepcut	25	H.-Q. 12, 25, 58 31 (H)	Bordon (for Nowshera) Bordon (for Peshawar)
11	H.-Q. 78 (H). 83, 84, 85	Aldershot	26	H.-Q. 40 (H) 48, 71 15	Jubbulpore (for Bulford) Nasirabad (for Bulford)
12	H.-Q. 6, 23 49 91 (How.)	Lahore Jullundur Ferozepore Lahore	27	H.-Q. 21, 24, 37 (H) 47	Mhow
13 (Army)	H.-Q. 8, 44 82 (How) 2	Edinburgh Dunbar	28	H.-Q. 3, 5 57 (H) 1	Meerut Bareilly
14	H.-Q. 68, 88 (H) 38, 61 (H)	Quetta (for Bangalore) Hyderabad (Sind) (for Bangalore)			
15	H.-Q. R, T, U, S (H)	Bangalore (for Kirkee and Sec- underabad)			

Allotment of Batteries to Field Brigades.

Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.
H	8th	1	28th	18	3rd	35	2nd	52	1st	69	6th	86	16th
P	21st	2	13th	19	9th	36	22nd	53	2nd	70	24th	87	2nd
Q		3	28th	20	"	37	27th	54	10th	71	26th	88	14th
R	15th	4	4th	21	27th	38	14th	55	22nd	72	16th	89	23rd
S		5	28th	22	24th	39	19th	56	24th	73	5th	90	"
T		6	12th	23	12th	40	26th	57	28th	74	6th	91	12th
U		7	4th	24	27th	41	20th	58	25th	75	3rd	92	17th
V	8th	8	13th	25	25th	42	2nd	59	18th	76	9th	93	18th
W		9	7th	26	17th	43	7th	60	23rd	77	6th	94	"
X	21st	10	17th	27	16th	44	13th	61	14th	78	11th	95	"
Y		11	1st	28	9th	45	20th	62	3rd	79	6th	96	19th
Z		12	25th	29	19th	46	10th	63	5th	80	1st	97	"
		13	17th	30	10th	47	27th	64	"	81	5th	98	1st
		14	4th	31	25th	48	26th	65	3rd	82	13th	99	20th
		15	26th	32	22nd	49	12th	66	4th	83	11th	100	23rd
		16	7th	33	"	50	24th	67	20th	84	"		
		17	"	34	16th	51	10th	68	14th	85	"		

Light Brigades, Royal Artillery.

Brig.	H.-Q. and Batteries.	—	Brig.	H. Q. and Batteries.	—
1st	H.-Q., 6, 8, 10	Egypt	4th	H.-Q., 15, 20, 21	Deeput
2nd	H.-Q., 5, 7, 9	Bulford			
3rd	H.-Q., 16, 18, 19	Norwich	5th	H.-Q., 1, 13, 14	Ewshott

Indian Mountain Brigades, Royal Artillery.

Brig.	H.-Q. and British Light Batteries.	—	Brig.	H.-Q. and British Light Batteries.	—
20th	H.-Q. 4 (How.)	Quetta	23rd	H.-Q. 17 (How.)	Peshawar
21st	H.-Q. 12 (How.)	Jutogh (for Kohat)	24th	H.-Q. 11 (How.)	Khyra Gali
		Jutogh (for Rawalpindi)	25th	H.-Q.	Razmak
22nd	H.-Q. 3 (How.)	Abbottabad		2 (How.)	Kohat (for Jutogh)
		Kakul			Kalabagh (for Jutogh)

Medium Brigades, Royal Artillery.

Brig.	H.-Q. and Batteries.	—	Brig.	H.-Q. and Batteries.	—
1st	H.Q. 1, 3 (H) 5 (H) 22 (H)	Larkhill	5th	H.Q., 17 21 (H) 15 (H) 20 (H)	Ambala
2nd	H.Q., 7 (H), 4, 8 (H), 12 (H)	Shoeburyness	6th	H.Q., 19 (H) 24 (H) 18	Peshawar
3rd	H.Q., 2, 10 (H) 11 (H) 6 (H)	Longmoor		23 (H)	Ferozepore
4th	H.Q., 9 13 (H) (HD) 14 (H) 16 (H)	Muttra Agra Delhi Muttra	7th	H.Q. 26 (H), 27 (H), 28 (H) 25	Fort Brockhurst
					Christchurch
					Fort Fareham
					Clarence Barracks, Portsmouth
					Fort Widley, Portsmouth

Anti-Aircraft Brigade, Royal Artillery.

Brigade.	H.Q. and Btys.	—	Brigade.	H.Q. and Btys.	—
1st	H.Q. 1, 2, 3	Blackdown	2nd	H.Q. 4, 5, 6	Clarence Bks. Portsmouth

Heavy Brigade, Royal Artillery.

Brigade.	H.Q. and Batteries.	—
1st	H.Q. 3, 5, 16, 28.	Plymouth.

Heavy Batteries, Royal Artillery.

Bat-tery.	—	Bat-tery.	—	Bat-tery.	—
1	(Cadre) Clarence Barracks, Ports-mouth	11	Singapore	23	Bombay
2	(Cadre) Jamaica	12	Hong Kong	24	(Cadre) Plymouth
4	Gibraltar	13	Karachi	25	Mauritius
6	Malta	14	Bombay	26	Bere Island
7	Aden	15	Ceylon	27	Gibraltar
8	(Cadre) Culver (I. of W.)	17	Lough Swilly	29	Gibraltar
9	Aden	18	Ceylon	30	(Cadre) Sheerness
10	Malta	19	Bere Island	31	Hong Kong
		20	Hong Kong	32	Spike Island
		21	Shoeburyness	33	Fort Carlisle
		22	Singapore		

Survey Co., Royal Artillery Larkhill

C.—Royal Engineers**Stations of the Head Quarters of Units.**School of Military Engineering,
Chatham.School of Electric Lighting, Gosport
Training Battalion, R.E., Chatham

Depôt Battalion, R.E., Chatham

R.E. Mounted Depôt, Aldershot

Railway Training Centre, Longmoor

Rhine Railway Co., Rhine

1st Field Squadron, Aldershot

1st (Fortress) Co., Gibraltar

2nd (Field) Co., Egypt

3rd (Fortress) Co., Dover

4th (Fortress) Co., Gosport

5th (Field) Co., Aldershot

6th (Field) Park Co., Aldershot

7th (Field) Co., Rhine

8th (Railway) Co., Longmoor

9th (Field) Co., Shorncliffe

10th (Railway) Co., Longmoor

11th (Field) Co., Aldershot

12th (Field) Co., Aldershot

13th (Survey) Co., York

14th (Survey) Co., Edinburgh

15th (Field Park) Co., Aldershot

16th (Fortress) Co., The Aerodrome,

Cattrick Village, Yorks.

17th (Field) Co., Bulford

18th (Field Park) Co., Shorncliffe

19th (Survey) Co., Southampton

22nd (Fortress) Co., Gosport

23rd (Field) Co., Aldershot

24th (Fortress) Co., Malta

26th (Field) Co., Aldershot

30th (Fortress) Co., Plymouth

31st (Fortress) Co., Ceylon

33rd (Fortress) Co., Queenstown Har-
bour

34th (Fortress) Co., Guernsey

35th (Fortress) Co., Pembroke

36th (Fortress) Co., Sierra Leone

38th (Field) Co., Aldershot

39th (Fortress) Co., Sheerness

40th (Fortress) Co., Hong Kong

41st (Fortress) Co., Singapore

42nd (Field) Co., Egypt

43rd (Fortress) Co., Mauritius

44th (Fortress) Co., Jamaica

45th (Fortress) Co., Portsmouth

49th (Fortress) Co., North Queens-

54th (Field) Co., Bulford [ferry

55th (Field) Co., Catterick

56th (Field) Co., Shanghai

58th (Porton) Co., Porton

59th (Field) Co., Catterick

Experimental Bridging Estabt., Christ-
church1st A.A. Searchlight Bn. R.E., Black-
down

D.—Royal Corps of Signals

Stations of the Head Quarters of Units.

School of Signals, Catterick	Northern Command Signal Co., York
Depôt Bn. R. Signals, Catterick	Scottish Command Signal Co., Edinburgh
Training Bn. R. Signals, Catterick	Southern Command Signal Co., Salisbury
Signals Experimental Estab't., Woolwich	Western Command Signal Co., Chester
"A" Corps Signals, Ewshott	North Ireland Signal Co., Belfast
1st Cavalry Divisional Signals	South Ireland Signal Section, Spike Island
"D" Troop, Cavalry Divisional Signals, Aldershot	Rhine Command Signal Co., Wiesbaden
"E" Troop, Cavalry Divisional Signals, Tidworth	Rhine Field Signal Co., Wiesbaden
1st Divisional Signals, Aldershot	No. 1 Co., Egypt Signals, Egypt
2nd Divisional Signals, Aldershot	No. 3 Co. Egypt Signals, Egypt
3rd Divisional Signals, Bulford	No. 2 Wireless Co., Sarafand
4th Divisional Signals, Colchester	Signal Section, Iraq
No. 1 Anti-Aircraft Signal Co., Blackdown	Signal Section, Gibraltar
No. 1 (Med. Art.) Signal Section, Colchester	Signal Section, Malta
No. 2 (Med. Art.) Signal Section, Larkhill	Signal Section, Malaya
No. 1 (Field Art.) Signal Section, Newcastle-on-Tyne	Signal Section, Hong Kong
No. 2 (Field Art.) Signal Section, Edinburgh	Signal Section, North China
Aldershot Command Signal Co., Aldershot	Signal Section, Mauritius
Eastern Command Signal Co., London	Signal Section, Bermuda
	Signal Section, Jamaica
	Signal Section, Sierra Leone
	Signal Section, Ceylon
	"L" Co., Jubbulpore

E.—Infantry Regiments

Regiment.	Location.	Commanding Officer.	Remarks.
1st Grenadier Guards	Tower of London	Lt.-Col. E. J. L. Pike, M.C., <i>p.s.c.</i>	
2nd ditto	Chelsea Barracks	Lt.-Col. G. E. C. Rasch, D.S.O.	
3rd ditto	Aldershot	Lt.-Col. A. F. A. N. Thorne, C.M.G., D.S.O., <i>p.s.c.</i>	
1st Coldstream Guards	Aldershot	Lt.-Col. E. D. H. Tolle-mache, D.S.O., M.C., <i>p.s.c.</i>	
2nd ditto	Windsor	Lt.-Col. P. R. B. Lawrence, M.C.	
3rd ditto	Wellington Barracks	Lt.-Col. J. C. Brand, D.S.O., M.C.	
1st Scots Guards	Wellington Barracks	Lt.-Col. G. H. Loder, M.C.	
2nd ditto	S. China Command (for Warley Barracks)	Lt.-Col. E. C. T. Warner, D.S.O., M.C.	
1st Irish Guards	Aldershot	Lt.-Col. R. V. Pollok, C.B.E., D.S.O., <i>p.s.c.</i>	
1st Welsh Guards	Chelsea Barracks (for Egypt)	Lt.-Col. R. E. K. Leatham, D.S.O.	
1st Royal Scots	The Royal Regt. Glasgow	Lt.-Col. N. K. Charteris, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto		Lt.-Col. F. C. Tanner, C.M.G., D.S.O., <i>p.s.c.</i>	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
1st The Queen's Royal Regiment (West Surrey)	S. China Command (for Malta)	Lt.-Col. H. C. Ponsonby, D.S.O., M.C.	
2nd ditto	Dover	Lt.-Col. H. N. A. Hunter, D.S.O.	
1st The Buffs (East Kent Regt.)	Bareilly	Lt.-Col. H. L. Smith	
2nd ditto	Aldershot	Bt.-Col. J. Crookenden, D.S.O.	
1st The King's Own Royal Regiment (Lancaster)	Aldershot	Lt.-Col. H. A. Kaulbach, O.B.E.	
2nd ditto	Kuldana	Lt.-Col. C. W. Grover	
1st Northumberland Fusiliers	York	Lt.-Col. W. N. Herbert, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Nowshera (for Lahore)	Lt.-Col. S. H. Kershaw, D.S.O., <i>p.s.c.</i>	
1st Royal Warwickshire Regiment	Woking	Lt.-Col. C. T. Tomes, D.S.O., M.C., <i>p.s.c.</i>	
2nd ditto	Bombay and Deolali	Lt.-Col. J. A. M. Bannerman, D.S.O., <i>p.s.c.</i>	
1st Royal Fusiliers (City of London Regiment)	Ambala	Lt.-Col. R. H. Pipon, D.S.O., M.C.	
2nd ditto	Rhine	Lt.-Col. R. Howlett, D.S.O., M.C.	
1st The King's Regiment (Liverpool)	Soudan (for Egypt)	Lt.-Col. D. M. King, D.S.O., M.C., <i>p.s.c.</i>	
2nd ditto	Lichfield	Bt.-Col. L. R. Schuster, D.S.O., <i>p.s.c.</i>	
1st Norfolk Regiment	Egypt (for China)	Lt.-Col. J. P. L. Mostyn	
2nd ditto	Aldershot	Lt.-Col. S. J. P. Scobell, C.M.G., D.S.O., <i>p.s.c.</i>	
1st Lincolnshire Regiment	Dover	Lt.-Col. F. S. Thackeray, D.S.O., M.C.	
2nd ditto	Lucknow (for Soudan)	Lt.-Col. A. B. Johnson, D.S.O.	
1st Devonshire Regiment	Malta	Lt.-Col. W. E. Scafe, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Devonport	Lt.-Col. E. Hewlett, C.M.G., O.B.E.	
1st Suffolk Regiment	Colchester	Lt.-Col. W. N. Nicholson, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Shanghai Defence Force (for Secunderabad)	Lt.-Col. W. M. Campbell, D.S.O., M.C.	
1st The Somerset Light Infantry (Prince Albert's)	Egypt and Cyprus (for Hong Kong)	Lt.-Col. C. H. Little, D.S.O.	
2nd ditto	Tidworth	Lt.-Col. H. I. R. Allfrey, D.S.O., M.C.	
1st The West Yorkshire Regiment (The Prince of Wales's Own)	Hollywood	Lt.-Col. A. M. Boyall, D.S.O.	
2nd ditto	Mhow (for Aden)	Lt.-Col. W. A. Davenport, D.S.O., M.C.	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
1st East Yorkshire Regiment	N. China Command (for Lucknow)	Lt.-Col. D. F. Anderson, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Aldershot	Lt.-Col. W. G. Geddes, D.S.O.	
1st Bedfordshire and Hertfordshire Regt. and ditto	Shanghai Defence Force (for Mhow) Dover	Lt.-Col. J. P. Tredennick, D.S.O., O.B.E., <i>p.s.c.</i> Lt.-Col. W. R. H. Dann, D.S.O.	
1st Leicestershire Regiment	Kamptee and Nagpur	Lt.-Col. C. S. Davies, C.M.G., D.S.O.	
2nd ditto	Rhine	Lt.-Col. W. T. Bromfield	
1st The Green Howards (Alexandra, Princess of Wales's Own Yorkshire Regiment) and ditto	Strensall	Lt.-Col. H. W. McCall, C.M.G., D.S.O.	
	Egypt and Cyprus	Lt.-Col. C. H. de St. P. Bunbury	
1st Lancashire Fusiliers and ditto	Egypt (for Donvan)	Lt.-Col. R. Luker, C.M.G., D.S.O. <i>p.s.c.</i>	
	Wellington, Calicut and Malapuram	Lt.-Col. G. E. Tallents, D.S.O.	
1st Royal Scots Fusiliers	Portsmouth (for Bordon)	Lt. Col. H. C. Maitland Makgill Crichton, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Ferozepore	Bt.-Col. R. G. Crauford, D.S.O., <i>p.s.c.</i>	
1st Cheshire Regiment	Poona	Lt.-Col. E. C. Maxwell, O.B.E., M.C.	
2nd ditto	Tidworth	Lt.-Col. A. W. Stericker, D.S.O., <i>p.s.c.</i>	
1st Royal Welch Fusiliers and ditto	Quetta	Lt.-Col. H. V. V. Kyrke, D.S.O.	
	Rhine	Lt.-Col. P. R. Butler, D.S.O.	
1st South Wales Borderers	Egypt (for China)	Lt.Col. R. F. Gross, D.S.O., <i>p.s.c.</i>	
2nd ditto	Aden (for Portsmouth)	Lt.-Col. T. C. Greenway, D.S.O.	
1st King's Own Scottish Borderers and ditto	Bordon	Lt.-Col. H. J. N. Davis, C.M.G., D.S.O.	
	Hong Kong	Lt.-Col. L. J. Comyn, C.M.G., D.S.O., <i>p.s.c.</i>	
1st The Cameronians (Scottish Rifles) and ditto	Catterick	Lt.Col. H. C. H. Smith, D.S.O.	
	Razmak (for Nowshera)	Lt.-Col. A. R. MacAllen	
1st Royal Inniskilling Fusiliers	Belfast	Lt.-Col. R. C. Smythe, C.M.G., D.S.O.	
1st Gloucestershire Regiment and ditto	Portland (for China)	Lt.-Col. J. Fane, D.S.O.	
	Jhansi (for Gravesend)	Lt.-Col. R. L. Beasley, D.S.O.	
1st Worcestershire Regiment	Allahabad	Lt.-Col. D. F. O. Faviell, D.S.O.	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
2nd Worcestershire Regiment	Rhine	Lt.-Col. F. P. Dunlop, C.B.E., D.S.O. <i>p.s.c.</i>	
1st East Lancashire Regiment	Quetta	Lt.-Col. W. J. Cranstons, D.S.O.	
2nd ditto	Pembroke Dock (for Catterick)	Lt.-Col. J. H. L. Poë, D.S.O.	
1st East Surrey Regiment	Gharial	Lt.-Col. M. J. A. Jourdier, D.S.O., <i>p.s.c.</i>	
2nd ditto	Gibraltar (for Catterick)	Lt.-Col. M. J. Minogue, D.S.O., M.C.	
1st The Duke of Cornwall's Light Infantry	Lebong and Barrackpore	Lt.-Col. A. P. Dene, C.M.G., D.S.O.	
2nd ditto	Aldershot	Lt.-Col. H. T. Dobbin, C.B.E., D.S.O.	
1st The Duke of Wellington's Regiment (West Riding)	Devonport	Lt.-Col. F. H. B. Wellesley.	
2nd ditto	Singapore (for Ahmednagar)	Lt.-Col. C. J. Pickering, C.M.G., D.S.O., <i>p.s.c.</i>	
1st Border Regiment	Bordon	Lt.-Col. E. Roach-Kelly, D.S.O.	
2nd ditto	North China Command	Lt.-Col. A. J. Ellis, D.S.O., <i>p.s.c.</i>	
1st Royal Sussex Regiment	Bordon	Lt.-Col. C. E. Bond, C.M.G., D.S.O.	
2nd ditto	Rawalpindi	Lt.-Col. J. S. Woodruffe, D.S.O., O.B.E.	
1st Hampshire Regiment	Multan	Lt.-Col. H. G. F. Frisby	
2nd ditto	Plymouth (for Rhine)	Lt.-Col. C. R. U. Savile, D.S.O., O.B.E., <i>p.s.c.</i>	
1st South Staffordshire Regiment	Khartoum (for Lichfield)	Lt.-Col. J. R. M. Mins-hull-Ford, D.S.O., M.C.	
2nd ditto	Shorncliffe (for China)	Lt.-Col. W. W. Roche	
1st Dorsetshire Regt.	Meerut	Lt.-Col. A. L. Ramsome, D.S.O. M.C.	
2nd ditto	Rhine	Lt.-Col. W. Clemson, D.S.O.	
1st The Prince of Wales's Volunteers (South Lancashire)	Tidworth (for Rhine)	Lt.-Col. F. H. Charlton, D.S.O.	
2nd ditto	Jubbulpore	Lt.-Col. B. Evans	
1st Welch Regiment	Gosport	Lt.-Col. G. Fleming, D.S.O.	
2nd ditto	Shanghai Defence Force (for Singapore)	Lt.-Col. T. G. Mathias, D.S.O.	
1st The Black Watch (Royal Highlanders)	Chakrata	Lt.-Col. R. A. Bulloch, D.S.O.	
2nd ditto	Fort George (for Egypt)	Lt.-Col. L. P. Evans, V.C., C.M.G., D.S.O., <i>p.s.c.</i>	
1st Oxfordshire and Buckinghamshire Light Infantry	Parkhurst	Lt.-Col. M. F. Day, M.C., <i>p.s.c.</i>	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
2nd Oxfordshire and Buckinghamshire Light Infantry	Calcutta	Lt.-Col. W. H. M. Freestun, C.M.G., D.S.O.	
1st Essex Regiment	Colchester	Lt.-Col. A. E. M. Sinclair Thomson, D.S.O.	
2nd ditto	Cawnpore and Benares (for Landi Kotal)	Lt.-Col. H. R. Bowen, D.S.O.	
1st The Sherwood Foresters (Nottinghamshire and Derbyshire Regiment)	Londonderry (for Shorncliffe)	Lt.-Col. R. T. Foster, D.S.O.	
2nd ditto	Karachi and Hyderabad	Lt.-Col. R. S. Hart, D.S.O.	
1st The Loyal Regiment (North Lancashire)	Secunderabad	Lt.-Col. W. A. T. B. Somerville, D.S.O.	
2nd ditto	Gravesend (for Aldershot)	Lt.-Col. W. Green, D.S.O.	
1st Northamptonshire Regiment	Shanghai Defence Force (for Malta)	Lt.-Col. S. H. J. Thunders, C.M.G., D.S.O., M.C.	
2nd ditto	Colchester	Lt.-Col. G. L. Crossman, C.M.G., D.S.O.	
1st The Royal Berkshire Regiment (Princess Charlotte)	Fyzabad	Lt.-Col. A. G. M. Sharpe, D.S.O., O.B.E.	
2nd ditto [of Wales's]	Rhine (for Aldershot)	Lt.-Col. J. P. B. Robinson, C.M.G., D.S.O., p.s.c.	
1st Queen's Own Royal West Kent	Madras (for Bangalore)	Lt.-Col. A. K. Grant, D.S.O.	
2nd ditto [Regiment]	Guernsey	Lt.-Col. E. H. Norman, D.S.O., O.B.E.	
1st King's Own Yorkshire Light Infantry	Blackdown	Lt.-Col. A. R. Keppel	
2nd ditto	Peshawar	Lt.-Col. E. H. Rigg, D.S.O.	
1st King's Shropshire Light Infantry	Dinapore (for Razmak)	Lt.-Col. B. E. Murray, D.S.O.	
2nd ditto	Aldershot	Lt.-Col. J. C. Hooper, D.S.O.	
1st Middlesex Regiment (Duke of Cambridge's Own)	Catterick	Lt.-Col. W. A. Stewart, O.B.E.	
2nd ditto	Ahmednagar (for Madras)	H. P. F. Bicknell, D.S.O.	
1st King's Royal Rifles Corps	Lucknow	Lt.-Col. F. L. Pardoe, D.S.O.	
2nd ditto	Aldershot (for Tidworth)	Lt.-Col. T. G. Dalby, D.S.O.	
1st Wiltshire Regiment (Duke of Edinburgh's)	Plymouth	Lt.-Col. P. S. Rowan, D.S.O., p.s.c.	
2nd ditto	Trimulgherry (for China)	Lt.-Col. C. A. Barker, O.B.E.	
1st Manchester Regiment	Shorncliffe	Lt.-Col. C. C. Stapledon	
2nd ditto	Maymyo	Lt.-Col. J. R. Heelis, M.C.	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
1st North Staffordshire Regiment (The Prince of Wales's)	Nasirabad and Ahmedabad	Lt.-Col. H. V. R. Hodson, D.S.O.	
2nd ditto	Blackdown	Lt.-Col. D. G. Johnson, V.C., D.S.O., M.C.	
1st York & Lancaster Regiment	Bordon (for Londonderry)	Lt.-Col. T. W. Parkinson, D.S.O.	
2nd ditto	Landi Kotal (for Dinapore)	Lt.-Col. M. G. H. Barker, D.S.O., <i>p.s.c.</i>	
1st Durham Light Infantry	Egypt	Lt.-Col. C. L. Matthews, D.S.O.	
2nd ditto	Sialkot	Lt.-Col. R. T. Lee, C.M.G., O.B.E., <i>p.s.c.</i>	
1st Highland Light Infantry (City of Glasgow Regt.)	Aldershot	Lt.-Col. H. M. Craigie Halkett, C.M.G., D.S.O.	
2nd ditto	Bangalore (for Cawnpore)	Lt.-Col. W. H. E. Segrave, D.S.O., <i>p.s.c.</i>	
1st Seaforth Highlanders (Ross-shire), Buffs (The Duke of Albany's)	Dover	Lt.-Col. V. M. Fortune, D.S.O., <i>p.s.c.</i>	
2nd ditto	Lahore (for Jhansi)	Lt.-Col. J. O. Hopkinson, D.S.O., M.C.	
1st Gordon Highldrs.	Delhi	Lt.-Col. I. Picton-Warlow	
2nd ditto	Ballykinlar	Lt.-Col. J. Forbes-Robertson, V.C., D.S.O., M.C.	
1st The Queen's Own Cameron Highlanders	Rangoon	Lt.-Col. R. Campbell, D.S.O.	
2nd ditto	Edinburgh	Lt.-Col. J. S. Drew, D.S.O., M.C., <i>p.s.c.</i>	
1st Bn. The Royal Ulster Rifles	Aldershot	Lt.-Col. D. T. C. K. Bernard, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Poona and Kirkee	Lt.-Col. H. R. Goodman, D.S.O.	
Royal Irish Fusiliers (Princess Victoria's)	Agra	Lt.-Col. F. W. E. Johnson, D.S.O.	
1st Argyll and Sutherland Highlanders (Princess Louise's)	Shorncliffe	Lt.-Col. A. W. R. Sprot, D.S.O.	
2nd ditto	Jamaica and Bermuda	Lt.-Col. R. G. MacLaine, M.C.	
1st Rifle Brigade (Prince Consort's Own)	Jullundur	Lt.-Col. H. M. Wilson, D.S.O., <i>p.s.c.</i>	
2nd ditto	Colchester	Lt.-Col. F. H. Burnett-Nugent, D.S.O., O.B.E.	

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Col. Comdt. K. M. Laird, D.S.O., <i>p.s.c.</i>		
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2nd Battalion	..	Farnborough.
Lt.-Col. J. M. Hulton, C.B.E., D.S.O.		
3rd Battalion (less 1 Section)	..	Lydd.
Lieut.-Col. H. D. Carlton, D.S.O.		
4th Battalion	..	Catterick.
Lieut.-Col. M. C. Festing, D.S.O., <i>p.s.c.</i>		
5th Battalion	..	Perham Down, Salisbury Plain.
Lieut.-Col. C. A. Bolton, C.B.E., <i>p.s.c.</i>		
1 Section, 3rd Battalion	..	Cairo.
Central Schools	..	Wool.
Lt.-Col. E. J. Carter.		
1st Armoured Car Company	..	Kazmak (for Peshawar).
2nd	..	Bangalore (for Razmak).
3rd	..	Cairo.
5th	..	Shanghai Defence Force.
6th	..	Peshawar (for Bangalore).
7th	..	Lahore.
8th	..	Kirkee.
9th	..	Cawnpore & Calcutta.
10th	..	Quetta.
11th	..	Delhi.
12th	..	(Less one Section) Bovington.
1 Section, 12th Armoured Car Company	..	Rhine.

II. THE ARMY IN INDIA

[Corrected up to the 1st of August, 1928.]

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LL.D.

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PESHAWAR BRIGADE

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K.C.M.G., D.S.O., B.S.

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(*Secunderabad*)

Brigade Commander. Colonel (Temp. Brigadier) A. Campbell Ross,
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10TH (JUBBULPORE) INFANTRY BRIGADE

(*Jubbulpore*)

Brigade Commander. Colonel (Temp. Brigadier) C. J. B. Hay, C.M.G.,
C.B.E., D.S.O., I.A., *p.s.c.*

11TH (AHMEDNAGAR) INFANTRY BRIGADE

(*Ahmednagar*)

Brigade Commander. Colonel (Temp. Brigadier) J. C. Simpson, I.A.

12TH (SECUNDERABAD) INFANTRY BRIGADE

(*Secunderabad*)

Brigade Commander. Colonel (Temp. Brigadier) H. R. Headlam, C.M.G.,
D.S.O., B.S., *p.s.c.*

Bombay District

(*Bombay*)

G.O.C. Major-General C. A. Weir, C.B., C.M.G., D.S.O.,
B.S.

Madras District

(*Bangalore*)

G.O.C. Major-General A. L. Tarver, C.B., C.I.E.,
D.S.O., I.A., *p.s.c.*

SOUTHERN BRIGADE AREA

(*Fort St. George, Madras*)

Area Commander. Colonel (Temp. Brigadier) R. B. Worgan, C.S.I.,
C.V.O., D.S.O., I.A.

Burma Independent District

(*Maymyo*)

G.O.C. Major-General F. E. Coningham, C.B., C.S.I.,
C.M.G., D.S.O., I.A.

RANGOON BRIGADE AREA

(*Rangoon*)

Area Commander. Colonel (Temp. Brigadier) R. E. Solly-Flood,
C.M.G., D.S.O., B.S., *p.s.c.*

III. THE ROYAL AIR FORCE

1.—Air Council

- President of the Air Council.* Lieut.-Colonel the Rt. Hon. Sir Samuel John Gurney Hoare, Bart., G.B.E., C.M.G., M.P., Secretary of State for Air.
- Vice-President of the Air Council.* Major Sir Philip A. G. D. Sassoon, Bt., G.B.E., C.M.G., M.P., Under Secretary of State for Air.
- Members.* Marshal of the Royal Air Force Sir H. M. Trenchard, Br., G.C.B., D.S.O., D.C.L., LL.D., Chief of the Air Staff; Air Vice-Marshal Sir P. W. Game, K.C.B., D.S.O., *p.s.c.*, Air Member for Personnel; Air Vice-Marshal Sir J. F. A. Higgins, K.B.E., C.B., D.S.O., A.F.C., Air Member for Supply and Research; Sir W. F. Nicholson, K.C.B., Secretary of the Air Ministry.

2.—Air Ministry

- Secretary of State for Air.* Lieut.-Colonel the Rt. Hon. Sir Samuel J. G. Hoare, Bart., G.B.E., C.M.G., M.P.
- Under Secretary of State for Air.* Major Sir Philip A. G. D. Sassoon, Bt., G.B.E., C.M.G., M.P.
- Secretary of the Air Ministry.* Sir W. F. Nicholson, K.C.B.

Department of the Under Secretary of State for Air

- Director of Civil Aviation.* Air Vice-Marshal Sir W. S. Brancker, K.C.B., A.F.C.

Department of the Secretary of the Air Ministry

- Secretary.* Sir W. F. Nicholson, K.C.B.
- Deputy Secretary.* Sir S. Dannreuther, Kt., C.B.
- Principal Assistant Secretaries.* H. W. W. McAnally, Esq., C.B.; B. E. Holloway, Esq., C.B.; J. A. Webster, Esq., C.B., D.S.O.
- Director of Accounts.* J. S. Ross, Esq., C.B.E.
- Director of Contracts.* C. R. Brigstocke, Esq., C.B.
- Director of Meteorological Office.* G. C. Simpson, Esq., C.B., C.B.E., LL.D., D.Sc., F.R.S.

Air Ministry—continued

Directorate of Lands (Joint Service for War Office and Air Ministry)

Controller of Lands. H. G. Goligher, Esq., C.B.E.

Department of the Chief of the Air Staff

Chief of the Air Staff. Marshal of the Royal Air Force Sir H. M. Trenchard, Bt., G.C.B., D.S.O., D.C.L., LL.D.

Director of Operations and Intelligence. Air Commodore C. L. N. Newall, C.M.G., C.B.E., A.M. (Deputy Chief of the Air Staff).

Director of Organization and Staff Duties. Air Vice-Marshal Sir I. L. B. Vesey, K.B.E., C.B., C.M.G., D.S.O., *p.s.c.*

Signals. Air Commodore L. F. Blandy, C.B., D.S.O.

Director of Works and Buildings. Col. H. Biddulph, C.B., C.M.G., D.S.O.

Department of the Air Member for Personnel

Air Member for Personnel. Air Vice-Marshal Sir P. W. Game, K.C.B., D.S.O., *p.s.c.*

Director of Personal Services. Air Commodore A. E. Borton, C.B., C.M.G., D.S.O., A.F.C.

Director of Training. Air Commodore H. C. T. Dowding, C.M.G., *p.s.c.*

Director of R.A.F. Medical Services. Air Vice-Marshal D. Munro, C.B., C.I.E., M.B., M.A., F.R.C.S.(E.), K.H.S.

Department of the Air Member for Supply and Research

Air Member for Supply and Research. Air Vice-Marshal Sir J. F. A. Higgins, K.B.E., C.B., D.S.O., A.F.C.

Director of Technical Development. Air Commodore J. A. Chamier, C.B., C.M.G., D.S.O., O.B.E.

Director of Scientific Research. H. E. Wimperis, Esq., O.B.E., M.A., F.R.Ae.S., M.I.E.E.

Director of Airship Development. Group Captain P. F. M. Fellowes, D.S.O., A.D.C.

Director of Equipment. Air Commodore A. M. Longmore, C.B., D.S.O., *q.s.*

3.—R.A.F. Commands (United Kingdom)

(a) AIR DEFENCE OF GREAT BRITAIN

Headquarters: Hillingdon House, Uxbridge, Middlesex.

Air Officer Commanding-in-Chief. Air Marshal Sir John M. Salmond, K.C.B., C.M.G., C.V.O., D.S.O., A.D.C. (Temporarily detached).

Temporarily attached as A.O.C. in C. Air Vice-Marshal F. R. Scarlett, C.B., D.S.O.

Air Staff Duties. Air Commodore F. V. Holt, C.M.G., D.S.O., *q.s.*

R.A.F. Commands (United Kingdom)—*continued*

Wessex Bombing Area

Headquarters : Andover.

Air Officer Commanding. Air Vice-Marshal Sir J. M. Steel, K.B.E., C.B., C.M.G.

Station H.Q. ..	Andover.	No. 11 (Bomb.)	
No. 12 (Bomb.)		Sqdn.	Netheravon.
Sqdn.	Andover.	Station H.Q. ..	Upper Heyford.
*Staff College ..	Andover.	No. 10 (Bomb.)	
No. 100 (Bomb.)		Sqdn.	Upper Heyford.
Sqdn.	Bicester.	No. 99 (Bomb.)	
Station H.Q. ..	Bircham Newton.	Sqdn.	Upper Heyford.
No. 39 (Bomb.)		Station Flight ..	Upper Heyford.
Sqdn.	Bircham Newton.	Station H.Q. ..	Worthy Down.
No. 101 (Bomb.)		No. 7 (Bomb.)	
Sqdn.	Bircham Newton.	Sqdn.	Worthy Down.
No. 207 (Bomb.)		No. 58 (Bomb.)	
Sqdn.	Eastchurch.	Sqdn.	Worthy Down.
No. 9 (Bomb.) Sqdn.	Manston.		

Fighting Area

Headquarters : Uxbridge.

Air Officer Commanding. Air Vice-Marshal Sir Robert Brooke-Popham, K.C.B., C.M.G., D.S.O., A.F.C., *p.s.c.*

Night Flying Flight ..	Biggin Hill.	Station H.Q.	North Weald.
Station H.Q.	Duxford.	No. 29 (Fighter) Sqdn.	North Weald.
No. 19 (Fighter) Sqdn.	Duxford.	No. 56 (Fighter) Sqdn.	North Weald.
Station Flight	Duxford.	No. 111 (Fighter) Sqdn.	Sutton's Farm.
No. 25 (Fighter) Sqdn.	Hawkinge.	Station H.Q.	Tangmere.
Station H.Q.	Kenley.	No. 1 (Fighter) Sqdn.	Tangmere.
No. 23 (Fighter) Sqdn.	Kenley.	No. 43 (Fighter) Sqdn.	Tangmere.
No. 32 (Fighter) Sqdn.	Kenley.	Station H.Q.	Upavon.
Station H.Q.	Northolt.	No. 3 (Fighter) Sqdn.	Upavon.
†No. 24 (Commn.)		No. 17 (Fighter) Sqdn.	Upavon.
Sqdn.	Northolt.		
No. 41 (Fighter Sqdn.)	Northolt.		

No. 1 Air Defence Group

Headquarters : Sloane Square, London, S.W.1.

Auxiliary Air Force Units.

No. 502 (Ulster) (Bomb.)		No. 600 City of London	
Sqdn.	Aldergrove.	(Bomb.) Sqdn.	Hendon.
No. 503 (County of Lincoln) (Bomb.) Sqdn.	Waddington.	No. 601 County of London	
No. 504 (Bomb.) Sqdn.	Hucknall.	(Bomb.) Sqdn.	Hendon.
Superintendent, R.A.F.		No. 602 City of Glasgow	
Reserve	Hendon.	(Bomb.) Sqdn.	Renfrew.
		No. 603 City of Edinburgh	
		(Bomb.) Sqdn.	Turnhouse.
		No. 605 County of Warwick	
		(Bomb.) Sqdn.	Castle Bromwich.

• For discipline and administration only.

† Directly under Air Ministry for operations.

R.A.F. Commands (United Kingdom)—*continued*

(b) INLAND AREA

Headquarters : Bentley Priory, Stanmore, Middlesex.*Air Officer Commanding.* Air Vice-Marshal C. A. H. Longcroft, C.B.,
C.M.G., D.S.O., A.F.C.*Chief Staff Officer.* Air Commodore J. L. Forbes, O.B.E.

Units Administered direct by Inland Area Headquarters.

Air Ministry Wireless Section	Air Ministry. Uxbridge.	Home Communication Flight	Hendon.
*R.A.F. Central Band.			

No. 21 Group

Headquarters : West Drayton.

†Reception Depôt . .	West Drayton.	School of Store Ac- counting and Store Keeping	Kidbrooke.
†No. 1 Stores Depôt	Kidbrooke.	§Medical Stores Depôt	Kidbrooke.
Port Detachment . .	South Dock, West India Dock, E.14.	†No. 2 Stores Depôt	Altrincham.
†Record Office . .	Ruislip.	†No. 3 Stores Depôt	Milton.
‡R.A.F. M.T. Depôt . .	Shrewsbury.	†No. 4 Stores Depôt	Ickenham.
‡Home Aircraft Depôt	Henlow.	†The Packing Depôt	Ascot.
¶Aeroplane and Arma- ment Experimental Establishment . .	Martlesham	Detachment	Orfordness.
**No. 15 (Bomb.) Sqdn.	Martlesham.	R.A.F. Depôt . .	Uxbridge.
**No. 22 (Bomb.) Sqdn.	Martlesham.	(Including School of Physical Training.)	
		**R.A.F. Officers' Hospital	Uxbridge.

No. 22 Group

Headquarters : Farnborough.

†School of Photography	Farnborough.	School of Balloon Train- ing	Larkhill.
†Experimental Section, R.A.E.	Farnborough.	No. 13 (Army Coopera- tion) Sqdn. . . .	Andover.
No. 4 (Army Coopera- tion) Sqdn. . . .	Farnborough.	No. 2 (Army Coopera- tion) Sqdn. . . .	Manston.
School of Army Co- operation	Old Sarum.	No. 26 (Army Coop- eration) Sqdn. . . .	Catterick.
No. 16 (Army Coop- eration) Sqdn. . .	Old Sarum.		

* Directly under Director of Personal Services, Air Ministry, for technical administration.

† Directly under Director of Training, Air Ministry, for technical administration.

‡ Controlled directly by the Air Ministry as laid down in A.M.W.O. 822/1921.

§ Directly under Director of Medical Services, Air Ministry, for technical administration.

‖ Directly under Director of Equipment, Air Ministry, for technical administration.

¶ Administered as laid down in A.M.W.O. 33/1926.

** Under No. 21 Group for administration only.

R.A.F. Commands (United Kingdom)—continued**(b) Inland Area—continued****No. 23 Group***Headquarters* : " St. Vincents," Grantham.

No. 2 F.T.S. Digby.	No. 1. F.T.S. Netheravon.
No. 5 F.T.S. Sealand.	C.F.S. Wittering.
Armament and Gunnery School Eastchurch.	Electrical and Wireless School Flower Down.
School of Technical Training (Men) Manston.	Detachment of E. and W. School accommodated at Worthy Down.

(c) COASTAL AREA*Headquarters* : 33-34, Tavistock Place, W.C.1.*Air Officer Commanding.* Air Vice-Marshal C. L. Lambe, C.B., C.M.G., D.S.O.*Chief Staff Officer.* Group Captain P. H. L. Playfair, M.C.**Units Administered Direct by Coastal Area Headquarters**

*Inspector of Recruiting St., W.C.2.	†Central Medical Establishment Inn, W.C.2.
(a) R.A.F. Recruiting Depôt 4, Henrietta St., W.C.2.	R.A.F. Training Base .. Leuchars.
†Marine Aircraft Experimental Establishment	(a) Headquarters.
(a) Flying Boat Development Flight	(b) Accommodation for 5 F.A.A. Flights.
R.A.F. Station	R.A.F. Station Donibristle.
No. 482 (Coastal Reconnaissance) Flight	(a) No. 36 (Torpedo Bomber) Squadron.
	(b) Accommodation for 3 F.A.A. Flights.
	R.A.F. units for H.M.S. <i>Furious</i> .

No. 10 Group*Headquarters* : Lee-on-Solent

R.A.F. Base Calshot.	R.A.F. Base Gosport.
(a) Headquarters.	(a) Headquarters.
(b) No. 480 (Coastal Reconnaissance) Flight.	(b) Flying Section.
(c) H.Q. Training Squadron.	(c) Torpedo Development Section.
(d) Navigation School.	(d) Marine Craft Section.
(e) Seaplane Training Flight.	(e) R.A.F. Auxiliary <i>Adastral</i> .
(f) Marine Training Section.	(f) Accommodation for 6 F.A.A. Flights.
School of Naval Cooperation Lee-on-Solent.	(g) Storage Unit.

(d) ROYAL AIR FORCE, CRANWELL*Headquarters* : Cranwell, Sleaford, Lincs.*Air Officer Commanding.* Air Commodore F. C. Halahan, C.M.G., C.B.E., D.S.O., M.V.O.

Units as follow :—

R.A.F. (Cadet) College.
Band.

R.A.F. Hospital.

* Directly under Air Ministry for technical administration.

† Under the D.M.S., Air Ministry, for technical administration (medical).

‡ Controlled directly by the Air Ministry as laid down in A.M.W.O. 822/1921.

R.A.F. Commands (United Kingdom)—*continued***(e) ROYAL AIR FORCE, HALTON***Headquarters* : Halton House, Halton, Wendover, Bucks.*Air Officer Commanding.* Air Commodore I. M. Bonham-Carter, C.B.,
O.B.E.

Units as follow :—

No. 1 School of Technical Training	
Apprentices	Halton.
School of Cookery	"
Princess Mary's R.A.F. Hospital ..	"
(a) Pathological Laboratory ..	"
(b) Medical Training Depôt ..	"

R.A.F. COMMANDS (OVERSEAS)**(a) R.A.F., Middle East***Headquarters* : Villa Victoria, Cairo.*Air Officer Commanding.* Air Vice-Marshal T. I. Webb-Bowen, C.B.,
C.M.G.*Chief Staff Officer.* Air Commodore A. G. Board, C.M.G.,
D.S.O.*Units Administered Direct by Middle East Command Headquarters.*

R.A.F. Depôt, Middle East	Aboukir.
(a) Meteorological Station	"
(b) Port Detachment	Alexandria.
Station Headquarters	Heliopolis.
(a) Meteorological Station	"
No. 208 (Army Cooperation) Squadron ..	"
No. 216 (Bombing) Squadron	"
No. 45 (Bombing) Squadron	Helwan.
No. 47 (Bombing) Squadron	Khartoum.

Royal Air Force, Transjordan and Palestine.Headquarters* : Amman.

No. 14 (Bombing) Squadron	Amman.
No. 2 Armoured Car Coy.	Ramleh.
Meteorological Station	"
Supply Depôt	Sarafand.
R.A.F. Hospital	"
W/T Station	Jerusalem.
W/T Station	Ma'an.

Also the undermentioned military unit :—

No. 2. Wireless Coy., R.C.S. ..	Sarafand.
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* Directly under the High Commissioner for operations.

R.A.F. COMMANDS (OVERSEAS)—continued**(b) Iraq Command***Headquarters : Baghdad City.*

Air Officer Commanding. Air Vice-Marshal Sir E. L. Ellington,
K.C.B., C.M.G., C.B.E., *p.s.c.*
Chief Staff Officer. Air Commodore F. W. Bowhill, C.M.G.,
D.S.O.

R.A.F. Units as follow :—

Administered Direct by Command Headquarters.

Station Headquarters	Hinaidi.
Command Accounts Office	Baghdad.
Aircraft Depôt	Hinaidi.
General Hospital	"
Central Supply Depôt	"
Petrol Dump	"
Supply Depôt	Mosul.
No. 6 (Army Cooperation) Squadron	"
No. 30 (Bombing) Squadron	Hinaidi.
" 55 (Bombing) Squadron	"
" 70 (Bombing) Squadron	"
Armoured Car Wing	"
No. 84 (Bombing) Squadron	Shaibah.
Supply Depôt	Basrah.

Military Forces in Iraq.

3/5th Mahratta Light Infantry.	No. 2 Wireless Coy., R.C.S. (No. 2
63rd Co. Q.V.O. Madras	Section).
Sappers and Miners.	40th Combined Field Ambulance.
Iraq Signal Section.	

(c) R.A.F. India*Headquarters : Simla.*

Air Officer Commanding. Air Vice-Marshal Sir W. G. H. Salmond,
K.C.B., K.C.M.G., D.S.O., *p.s.c.*
Chief Staff Officer. Group Captain R. P. Mills, M.C., A.F.C.

Units as follow :—

<i>Headquarters, No. 1 Indian Wing</i> ..	Peshawar.
No. 60 (Bombing) Squadron ..	Kohat.
No. 20 (Army Cooperation)	
Squadron	Peshawar.
Detached Flight	Miranshah.
<i>Headquarters, No. 2 Indian Wing</i> ..	Risalpur, Nowshera.
No. 27 (Bombing) Squadron ..	" "
" 5 (Army Cooperation) Squadron ..	" "

R.A.F. COMMANDS (OVERSEAS)—*continued***(c) R.A.F. India—*continued***

Headquarters, No. 3 Indian Wing .. Quetta.

No. 31 (Army Cooperation)

Squadron "

Units administered direct by Command Headquarters :—

Aircraft Depot Karachi.

" Park Lahore.

No. 28 (Army Cooperation) Squadron .. Ambala.

Central Accounts Office Poona.

(d) R.A.F. Mediterranean

Headquarters : Valletta, Malta.

This Command comprises all units cooperating with the Navy in the Mediterranean Sea area.

Air Officer Commanding. Air Commodore R. H. Clark-Hall, C.M.G.,
D.S.O., *p.s.a.*

Units as follow :—

R.A.F. Base Calafrana, Malta.

No. 481 (Coastal Reconnaissance) Flight

R.A.F. Units for H.M.S. *Eagle* and *Courageous*.

(e) Aden Command

Air Officer Commanding. Group Captain W. G. S. Mitchell, C.B.E.,
D.S.O., M.C., A.F.C.

R.A.F. Units as follow :—

No. 8 (Bombing) Squadron Khormakshar.

Armoured Car Section.

Detachment, Somaliland.

THE ARMY QUARTERLY

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EDITORIAL

THE long and serious illness of His Majesty the King has caused—and, as we go to press, is still causing—the gravest anxiety to the whole Empire. During the arduous and critical period of his reign His Majesty has deservedly won the respect and loyal affection of his subjects all over the world. No man has ever served the State more devotedly or with a more unassuming dignity. His disinterested patriotism, his faith in the destiny of Britain and the Dominions and his devotion to duty are the characteristics which have especially endeared him to soldiers. In him all ranks recognize that they have a true friend who knows and appreciates their services, and who values their unswerving loyalty to the Crown. That His Majesty may be spared long to reign over us is the earnest prayer of the British Army.

* * * * *

The tenth anniversary of the Armistice has been observed with perhaps a deeper and fuller understanding than prevailed in any previous year. The flush of victory has faded: the thought of the price paid for victory by the young manhood of the Empire cannot and should not fade. It is now over ten years ago since our Armies received the order: "Hostilities will cease at eleven o'clock to-day, 11th November. Troops will stand fast on positions reached at the hour named." The perspective is sufficient to reveal that the sacrifice of each one of our million dead is of equal value, whether he fell in local defeat, or in victory, or in the dreary routine of trench warfare.

Those of the original British Expeditionary Force saved us in 1914 and won us time to arm; in the three following years our

dead paved the way to the inevitable victory which was not then in sight and which was to come in a fashion and at a time neither they nor we could foresee. In the spring of 1918 came the great crisis in which so many died that the Allies might be able to go forward and pay with other valuable lives the price of peace. So also we can now realize that at sea, and on all the other battlefields across Europe and half the world, our men who died did so somewhere along the tortuous path to victory. And we may think of them, our million dead, without distinction of rank, colour or creed, as co-equal in the sacrifice they made.

Throughout the Empire the sense of loss mingles with gratitude and pride to unite our many peoples in a common bond. For striking proof of this there is the wonderful way in which the Empire has tended the graves of its dead: the Imperial War Graves Commission is performing its truly Imperial task to the admiration of the world. Australia, New Zealand, Canada, Newfoundland, South Africa, India and the Colonies are all represented upon the Commission. Each has contributed her quota to the cost of the work of identification of the dead and their re-burial in the cemeteries which are now to be found all over the world: each has found a contingent of ex-Service men who are permanently employed in the duty of care and maintenance.

Tremendous difficulties have been overcome in identifying the dead wherever it is possible to do so. In many cases the names cannot be discovered. But no trouble is spared, no clue is considered too trifling to follow up, if there is a chance of a dead soldier's identity being established. And the work still goes on. It is impossible to convey in words an adequate impression of the simple dignity of our war cemeteries and memorials on the battlefields. Many people have made the pilgrimage to those upon the Western Front where the sympathetic cooperation of the French and Belgian Governments has been of so much value in many ways. Comparatively few have been able to visit those farther afield in Italy, Macedonia, Gallipoli, Egypt, Palestine, Iraq and East Africa, to mention only the principal theatres of war. The beautifully illustrated War Graves Number of *The Times* contains many pictures of these and is an altogether worthy tribute to the conception and execution of a great work in which we may all take a legitimate pride.

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The speech which President Coolidge delivered at Washington on Armistice Day, at a meeting held under the auspices of the

American Legion, has done much to enlighten public opinion in Europe as to the American attitude in the matter of disarmament. It is improbable that this pronouncement has been entirely welcome to the enthusiastic people who wished us to believe that the signing of the Kellogg Pact implied that the Government of the United States of America was giving a real impetus to a policy designed to bring about speedily a general disarming of the nations. But, at any rate, they will note with satisfaction that Mr. Coolidge assured his audience that war, viewed from its economic results, was the most destructive agency that ever afflicted the earth and also that he expressed a pious hope that wars might be avoided in the future. Clearly, however, the main object of his speech was to urge his own countrymen to face facts. His argument was that while military preparations did not absolutely prevent the recurrence of wars, reasonable preparations for defence were essential for a nation's safety. "If the European countries had neglected their defences," he remarked, "it is probable that war would have come much sooner. All human experience seems to demonstrate that a country which makes reasonable preparation for defence is less likely to be subject to a hostile attack and less likely to suffer a violation of its rights which might lead to war. . . . To be ready for defence is not to be guilty of aggression. We can have military preparation without assuming a military spirit. It is our duty to ourselves and to the cause of civilization, to the preservation of domestic tranquillity, to our orderly and lawful relations with foreign peoples, to maintain an adequate army and navy."

With these views, which Mr. Coolidge stated in his speech—and probably with truth—represent the "prevailing attitude" among his countrymen, there is little with which any reasonable human being can find fault. It would be well, therefore, if we in this country took note of them and bore them in mind. It is no use—however much we may be determined not to take part in another war—to lose sight of the obvious fact that "the forces of evil," as Mr. Coolidge explained, "are exceedingly powerful," and that a nation which is not prepared to defend itself in the event of aggression cannot expect to receive assistance in its hour of danger from any other nation. While, therefore, it is the duty of all sane and right-minded men and women to go on working unceasingly to bring about a better relationship between the nations of the world, it is no use their imagining that this can be effected in the twinkling of an eye. There is a lot of the tiger left in us, as the Prime Minister reminded the members of the League of Nations

Union a few weeks ago in a speech at the Albert Hall, and it is only by much patience and perseverance that the instinct for war can be eliminated from the minds of men. The day may come when war between the States of Europe may be as unthinkable as war between the States of North America is unthinkable to-day. But that day has not yet arrived, and the recent debates on the Army Estimates in the French Chamber make it quite clear that in France, at any rate, the majority of opinion does not hold that the spectre of invasion has been dispelled by treaty safeguards. Until a feeling of security from foreign aggression exists in a country, it is mere foolishness to suppose that its people will be willing to disarm. If a nation like the United States of America which has no age-old animosities to contend against, which has not suffered from centuries of violent hostilities, which desires peace, yet feels it necessary to maintain a powerful fleet and army for its defence, how can it be expected that the nations of Europe should feel inclined to throw away their arms ?

* * * * *

Although the Government of the United States of America is increasing expenditure upon its Army and Navy year by year—it must be remembered that there is no separate Air Force in America—the American Regular Army is still so small that the Americans must depend upon the early and efficient mobilization of their masses in a time of national emergency. It is not surprising, therefore, that the system of military education in the United States is most elaborately organized, the basic idea being to train in time of peace the very large number of officers and non-commissioned officers which would be required for new formations in the event of war.

In this country there is no counterpart of the American school or college where military training is compulsory, where the students wear uniform, and where army discipline is the rule. There are forty of such institutions in the United States, and although few of the youths so trained pass into the Regular Army, a large number take Commissions in the Reserve. West Point, which combines the functions of our Woolwich and Sandhurst, is of course well known to us.

For serving officers, and for officers of the Reserve and the National Guard, there are special schools of advanced instruction in each arm. One typical infantry school maintains for demonstration purposes an infantry regiment at war strength, a battalion of field artillery and a battalion of tanks. Courses at these establishments last nine months and the instruction is very good. Care is

taken to ensure uniformity of doctrine and training throughout the States.

The Staff School at Fort Leavenworth corresponds to our Staff College at Camberley. Here the rather severe course of instruction has been, most wisely, increased from one year to two, and two hundred students are up at a time. They work in syndicates. The doctrine of the offensive is encouraged and most attention is paid to open warfare, but mechanization and chemical warfare do not appear to be considered of tremendous importance, there being a tendency to regard the infantryman as the decisive factor. It is conceivable that the American Army is obliged to contemplate the possibility of operations in such a country and against such an enemy as would make the rifle of paramount importance, but it seems strange that greater store is not set upon the latest scientific weapons and equipment.

A limited number of National Guard and Reserve officers attend at Fort Leavenworth for instruction in administration and supply only. The course at the Army Industrial College aims at helping the officer to see all problems of supply in war with the eye of the trained business man.

There are military training camps of three grades which all able-bodied male citizens are eligible to attend, and the most advanced grade also trains non-commissioned officers of the Regular Army, the National Guard and the Reserve for Commissions in the Reserve. The numbers attending these camps depend upon the yearly appropriation of the War Department for this purpose.

Correspondence courses are another important feature of American military education, for they are deemed of great value in theoretical instruction. The courses are voluntary and are, in the first instance, intended for the citizen soldier. Each arm of the Service is responsible for its own course, which is prepared in its own Service School, and Fort Leavenworth has a special General Staff course of its own. The various Corps Area Headquarters actually conduct the courses, and the work involved must be exceedingly heavy. Naturally Reserve and National Guard officers form the bulk of the students, who already number nearly 30,000 a year, but a fair number of Regulars—mostly, it may be assumed, officers serving in detached, outlying stations—also take these courses. The scheme, which is now six years old, is said to be increasing in popularity.

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Little attention has been given in this country to the remarks

made by President Coolidge, in the speech to which reference has already been made in these notes, regarding the achievements of his countrymen in the Great War. The people of Great Britain fully appreciate the assistance which they received from the Americans after they joined the Allies and have never disguised their admiration of the gallantry of the "dough-boys" in the concluding stages of the fighting on the Western Front. But they may legitimately be somewhat astonished at some of the statements made by the President, and it is not unlikely, therefore, that they will consider that the following remarks made by the Bishop of Western New York, in a sermon recently delivered in Canterbury Cathedral, give a more modest and truer description of the part played by the United States in the war. "Boastfulness," said the Bishop, "whether in an individual or a nation, is a hateful thing. If, for example, America can rejoice in the transportation of 2,000,000 soldiers to France without loss of life, it adds to rather than detracts from our joy if we give the credit to the British Navy which so safeguarded the seas as to make it possible. If America congratulated herself that her Army knew no setback or defeat in the brief time that she was a combatant, she rounds out the truth by paying tribute to those nations that fought America's battles for the three heartrending years before, and so prepared the way for victories readily won. If she emerged from the welter of battle with eye undimmed and resources unabated which enabled her to become the creditor nation of the world and to aid in the reconstruction of Europe, she adds to her honour by generous recognition of the self-sacrifice of those nations which bled themselves white in the common cause. If she waged the war at great cost to herself, incurring a debt of fabulous proportions, she should thank God that the balance of that debt is not incommensurate with her resources. Ought my country to boast that the war brought us no accession of territory when we do not need it or when extra-continental possessions are already our Achilles' heel? We cannot deny that hitherto when we have needed new territory we have secured it, and when we wanted for our own interest to control a neighbour's territory we controlled it. Nor may we ever forget that we were offered and refused a mandate."

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In a lecture which he delivered some little time ago in Berlin upon the present and future development of the armies of the Great Powers, General von Seeckt, who as *Chef der Heeresleitung* was responsible for the reorganization of the German Army, had a

good deal of interest to say. He described his views as purely fanciful conceptions, untrammelled by the shackles of the Versailles Treaty and unconnected with the organization of, and the conditions prevailing in, the German *Reichswehr*. Although he said that he was merely parading his personal opinions, which had no official significance despite the appointments he had held, his views are of interest as disclosing the attitude of mind of a trained German soldier who realizes that war is always possible and realizes the importance of organizing a nation for its self-defence.

Touching upon the state of readiness for war of the belligerents in 1914, General von Seeckt expressed the conventional regret that Germany was not properly prepared for a long struggle: unfortunately everything had been staked upon the strength and rapidity of the first blow. He then went on to suggest that in this scientific age the idea of the "nation in arms" might be out of date because—and this appears to be his first and only "fanciful conception"—the mobilization of titanic armies in the last war did not end in the decisive annihilation of the enemy on the battlefield, but rather in a condition of what he described as stalemate. He could not see that the Powers to-day had made any great departure from the old principles of preparation for war, and in this connection, of course, he was unable to talk of Germany.

The present political situation he described as calling for a feeling of security in all nations against sudden attack; and he dismissed the problem of disarmament with the dictum that the guarantee of peace lay in the adjusting the balance of power rather than in seeking an idealistic and unattainable reduction of power. There is little of "military fantasy" in this point of view.

General von Seeckt then discussed the effect that the resources of science would have on modern highly trained armies, and in this connection assured his audience that the first law of strategy was still to compass the destruction of the enemy's army rather than the destruction of his country; but he added as an after-thought that "sometimes the principle might appear in different guise."

In discussing war in the air the General accepted as a matter of course, and emphasized the importance of, attacking the civilian population in the back areas of a hostile country. He expressed his astonishment that in Germany nothing was being done to provide some means of passive air defence, more especially as the country was deprived of any active air forces. He contemplated attack and counter-attack by rival air fleets whose primary object would be

to obtain mastery of the air before turning their attention to hostile bases and troop concentrations, and disturbing the enemy's mobilization of man-power and industry. Air attacks, he suggested, would be supported by a highly trained professional army which had been kept up to strength in time of peace and would, therefore, be able to strike at once without requiring time for mobilization. When he came to the rôle which would be played by the civil population, General von Seeckt made it appear that the *levée en masse* was not so out of date after all. According to his view, there would be a large permanent staff, consisting of professional soldiers of all ranks, through whose hands the whole able-bodied male youth of the nation would pass for training in time of peace. Though unfitted for manœuvre, the huge force thus created would supply drafts of its best elements to keep the fighting field army up to strength : and it would be used for national defence.

No expense would be spared in equipping the field army with the most up-to-date scientific weapons. But the arming of the masses would not have to be provided for by the accumulation of enormous reserves of material which would tend to become obsolescent before they were required. Arrangements would have to be made to begin, at almost a moment's notice, the mass production of weapons and munitions for the home army. Legislation to organize, and to reorganize from time to time, the country's economic resources on suitable lines would be necessary ; and Government subsidies to industry in time of peace would be unavoidable.

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It is unfortunate that in their desire to emphasize their love of peace and to show their readiness to be friends with all the world, it appears to be necessary at times for some of our leading politicians and publicists to say and to write things calculated to jeopardize this country's friendly relations with France. The *Army Quarterly* is a military journal, and, consequently, takes no part in party politics. But, nevertheless, it does view with some alarm the tendency which is now being displayed by certain political leaders and writers, to adopt a too critical attitude with regard to the policy of France. Such criticism can have little effect except to annoy the French and is not calculated to promote a more peaceful spirit in Europe—nor does there appear to be any real basis for this distrust of French policy. The French people are just as anxious for the maintenance of peace as we are ourselves.

There is no real justification for suggesting that France is framing

an aggressive policy either as the predominant continental military Power or as the head of a group of militant nations or because she is less anxious than we are to evacuate the Rhineland. A glance at her defence problem should be sufficient to dispel any such notion. She has two frontiers to consider, and both are of vital importance : the Lorraine basin lies close to Germany and the hydro-electrical installations on the Alps are very near Italian territory. Here also the proximity of the industrial region around Lyons has to be considered. Therefore, so long as large continental armies continue to be maintained, France, which has been twice invaded within the last sixty years, is bound to take such measures as will ensure the adequate defence of her frontiers.

Her losses in the Great War and her low birth rate during the war years are causing a progressive reduction in her man-power. Under her new laws she can only mobilize twenty "Metropolitan" divisions and twenty reserve divisions, and considerably more than half of these troops would be reservists.

France's new allies in Eastern Europe are in no condition to assist her in an aggressive military policy : indeed, the unifying, influence of a long period of peace is essential to the continued existence of these States with their large minorities of German extraction.

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The publication of the first part of the new French Infantry Manual discloses considerable change in drill and battle formations. No longer is the *groupe de combat* to consist of two *équipes*, one formed of riflemen and the other of a light automatic team : these are to be merged into a single fire unit composed of one light automatic and nine rifles under the immediate control of the *chef de group*.

It is the new one-year-service law which is primarily responsible for the change, as the shorter period of training will now make it impossible to provide junior non-commissioned officers in sufficient numbers to furnish the necessary leaders of the *équipes*. On mobilization, moreover, the majority of the *chefs de groupe* will be reservists and not serving soldiers, so that it is considered necessary to simplify infantry battle formations as much as possible.

Training amendments have more strictly defined the rôle of the *groupe* which is never to manœuvre, but merely to advance upon the objective. In this connection it is interesting to recall the French official account of the battles of Artois and Champagne in 1915 wherein it is stated that the young hastily trained formations

could only go straight on and were incapable of manœuvre. The *section*—consisting of three *groupes* and more or less equivalent to our platoon—is the smallest unit considered capable of independent manœuvre ; that is to say, one or more of its *groupes* may be called upon to provide covering fire during the advance.

The riflemen of the *groupe* will generally lead the attack and may be used as scouts, but the automatic will be ready at all times to develop its maximum fire-power. When arrived within assaulting distance of the enemy the *groupe* will close with him, each man using his own weapon to best advantage. Weapon training now, therefore, assumes an importance which it never had before in the French Army.

The efficiency of the new light automatic, which has trebled the fire-power of the company, contributes to the simplification of infantry attack training. Machine guns are no longer required to accompany the infantry advance in close support—a difficult operation which used to be adjudged necessary in order to compensate for the deficiencies of the lighter weapon—and can all be utilized for their proper rôle of providing covering fire from a distance. As a rule, their tasks will be allotted by the battalion commander.

The bayonet strength of a French infantry company is now comparatively weak. Fire-power, in all cases, is the prime consideration and infantry minor tactics are based upon the necessity of directing the maximum volume of fire upon the most vital points and areas. The number of close-support mortars has been doubled—there are now six per infantry regiment—and there has been a marked improvement in the type of weapon, so that more will be expected of infantry both in attack and defence. Even counter-attacks are to be carried out chiefly by fire ; and it is laid down that in exploiting a success reserves will usually seek to enlarge the gap in the enemy's line by fire assault on the two salients created by the gap rather than by following through after the first echelon.

It is contemplated that a considerable extension of the frontage usually allotted to a battalion in the attack will be possible when methods of observation, inter-communication and supply have been improved to meet the needs of the new organization. The difficulty would seem to be in training sufficient short-service men for these highly specialized duties, and in being obliged to rely, to a great extent, upon the reservist whose knowledge will need refreshment.

Comparing the fire-power of a French battalion on the latest

basis with a battalion of our own Army, it appears that we have ten fewer light automatics, about the same number of rifles, twice as many rifle-bombers, and the same number of machine guns. In addition, a British battalion has four anti-tank guns which a French battalion lacks.

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General Sir Arthur Paget, G.C.B., K.C.V.O., Colonel of The Buffs, whose death took place at Cannes on the 9th of December, had a long and distinguished career in the Army. He was gazetted to the Scots Guards in 1869 and four years later saw active service in the Ashanti Expedition on special service under Sir Garnet Wolseley. In 1885 he served with his battalion in the Egyptian War and took part in Sir Gerald Graham's operations round Suakin. In June 1895 he was promoted brevet-colonel in the Army and four years later, on becoming lieutenant-colonel in his Regiment, obtained the command of the 1st Battalion Scots Guards. During the South African War he commanded his battalion throughout Lord Methuen's advance through Cape Colony and was present at the actions of Belmont, Enslin, Modder River and Magersfontein. In April, 1900, he was promoted major-general and commanded a brigade in the advance to Pretoria. He subsequently commanded a column in the Free State, but relinquished his command, although pressed to retain it by the Prince of Wales, and returned to England in June, 1901. After the close of the South African War Sir Arthur was given the command of the 1st Division at Aldershot, and proved himself a highly efficient commander with the courage of his convictions. In May, 1906, he was promoted lieutenant-general, and, on relinquishing his command, was given the K.C.V.O. Eighteen months later he was appointed G.O.C.-in-C., Eastern Command, in which capacity he was again a conspicuous success. On relinquishing this appointment in 1910, Sir Arthur was sent to Dublin to command the troops in Ireland. The "Curragh incident" in June, 1914, which led to the resignation of Sir John French from his position as Chief of the General Staff, adversely affected Sir Arthur's military career. Unlike Sir John French he did not consider that it was his duty to resign as the result of the Irish trouble, and his attitude in this matter led to an estrangement between the two men. As a consequence, when the Great War began Sir Arthur, instead of being given the command of the III Corps of the B.E.F. as was generally expected, was appointed to command the First Army in the Central Force for Home Defence. He worked with patriotic energy to train the troops under his

command, but he was bitterly disappointed at not being able to go on active service. As soon as the war was over he retired from the Army and devoted himself to yachting and gardening, spending much of his time on the Riviera. His death will be genuinely mourned by his old comrades in the Brigade of Guards and by the Army as a whole. He was a fine soldier of the old school ; a leader with a natural military instinct who knew how to handle men ; and, above all, a loyal and sincere friend.

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The British Army shares with the Belgian Army its sorrow on the death of Lieut.-General Baron Jacques de Dixmude. The General died a few weeks ago at Brussels in his seventy-first year. As a Colonel he commanded the Belgian troops at the bridge-head at Dixmude in October, 1914, and it was largely owing to his heroic example and fine leadership that their resistance proved successful. He was created a Baron at the end of the war and was given permission to inscribe on his coat of arms the letter " Y " to commemorate his fine service on the river Yser, and also to assume the motto "*Je tiendrai.*" He will always be regarded by the Belgian people as one of their national heroes.

The French Army has lost two distinguished soldiers in General Desticker and Colonel Gemeau, whose deaths have recently been announced. The former was well known to, and much respected by, British staff officers when he served as second to General Weygand on Marshal Foch's staff. The latter was the French liaison officer who was attached to Earl Haig's staff throughout the war, serving with the 1st Corps, the First Army and at G.H.Q. A very close friendship existed between Colonel Gemeau and the British Commander-in-Chief, and the former was a sincere admirer of the British Army. After the war he was appointed as instructor in English at the *Ecole Supérieure de Guerre* and his constant kindness to British officers in Paris endeared him to all with whom he came in contact.

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Colonel Bauer, the German officer engaged in some advisory capacity by the Government of China, enjoyed the probably unique distinction of having served continuously on the staff of the Supreme Command from August, 1914, to October, 1918, under the three successive Chiefs of the General Staff—Moltke, Falkenhayn and Hindenburg. A book by him with the title *Der grosse Krieg in Feld und Heimath* was reviewed in " Notes on Foreign War Books " in October, 1922, and it was then mentioned that he was

Ludendorff's most trusted henchman, "and according to Professor Delbrück so much his 'brain' that, if ever the First Quartermaster-General made a decision whilst away from Bauer, he invariably altered it by telephone after he returned to O.H.L." and had told Bauer. Colonel Bauer never brought luck to his masters. Originally the staff officer of the Supreme Command concerned with heavy artillery and sieges, it was he who was responsible for the disastrous German attack on the Grand Couronné de Nancy; for he advised that with his guns and ammunition available the French defences would fall like Liège and Namur. Similarly, he prophesied certain success at Verdun. Under Ludendorff he was concerned in the production of ammunition and war material, making out the celebrated Hindenburg programme for the greatly increased output which could never be reached, but which held over a million men fit for the field as munition workers—without being able to find hands to manufacture tanks. Finally, he became Ludendorff's adviser in semi-political matters in the relations between the Army and the Homeland: his action did much to bring about the final crash. After the Armistice he was the leading spirit in the revolutionary movement known as the Kapp *Putsch* in 1920, which also ended in fiasco. He then had to flee to Austria, but continued to keep touch of German Fascist and Monarchist organizations.

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The telegram of congratulation sent to the Emperor of Japan by Sir Laming Worthington-Evans, Secretary of State for War, on the occasion of His Imperial Majesty's Coronation at Kyoto on the 10th of November recalls to mind the visit paid to Great Britain by the Emperor, as Crown Prince, in 1921.

His Majesty was made a G.C.B., and appointed General in the British Army by King George on the 9th of May, 1921, the date he landed at Portsmouth. He subsequently visited various military centres: the Royal Military College at Sandhurst, the Staff College (where a portrait of his father the late Emperor hangs in the Field-Marshal's room), and Aldershot. The Crown Prince, as he then was, carried out all these inspections in the uniform of a British General. A Guard of Honour from the Lancashire Fusiliers, which has very old relations with the Japanese Army, dating from the years 1864-1866 when the 20th Foot was stationed in Yokohama, was provided on the occasion of the Prince's visit to Manchester.

It is interesting to note that the Japanese Military Attaché in London during the first portion of the War (Lieut.-General S.

Inagaki, K.C.M.G., C.B.) has been appointed Chief of the Household to His Imperial Highness Prince Kan-in, who accompanied the present Emperor during his European tour in 1921.

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In the review of "The War in the Air" (Vol. II), which appeared in the last number of the *Army Quarterly*, it was stated that the mine craters at La Boisselle were not in existence in June, 1916. Mr. H. A. Jones, the author of the book, has drawn the attention of the Editors to the fact that the existence of these craters can be traced on trench maps early in the year 1916. It is obvious, therefore, that the statement made in the review was incorrect and that the author is entirely exonerated from what was described as a "minor inaccuracy."

10th of December, 1928.

MORE MARNE THROUGH GERMAN SPECTACLES

(*With a Map*)

PART II of the German official monograph, *Das Marnedrama*, 1914,* giving details of the battle of the Marne, which space forbade being included in the Official Account of the war, deals with the events of the 7th and 8th of September, 1914, on the front of the left wing of the German First Army (Kluck), and the right wing and centre of the Second Army (Bülow). These were the German troops opposed to the French on the immediate right of the B.E.F., that is to say, the Fifth Army (General Franchet d'Esperey) and the left wing of the Ninth Army (General Foch). The volume is, therefore, of special interest.

The French account of these days has not yet been published ; but, if we are to believe the German narrative now before us, during this critical phase of the battle the Allied troops nearest to Sir John French's divisions did very little, almost nothing, and the Germans opposite to them merely carried out some re-alignment marches to secure their front and right flank.

When Kluck, about midnight of the 5th-6th of September, learned that Maunoury's Army from Paris was coming down on his right rear, he had hurriedly sent back his II and IV Corps to reinforce his flank guard. He left the III and IX Corps, his left wing, in the line, covering the flank of Bülow's Army, and he put them temporarily at that general's disposal. At 10 p.m. on the 6th, however, Kluck, finding his flank in graver danger than he first imagined, summoned the III and IX Corps, without informing Bülow, to recross the Marne and march north-westward to join his other corps, now facing west. After the corps orders for this retirement had gone out, Bülow's orders, in quite a contrary sense, arrived for the two corps to attack on the 7th. It was not until after midnight that Bülow learned, through a liaison officer, of Kluck's change of plan.

* Oldenburg : Stallin. 5 marks. Part I was reviewed in the *Army Quarterly*, July, 1928.

Bülow immediately directed that his proposed attack should be carried out only by the X and Guard Corps of his own Army, that is his left wing ; the X Reserve Corps, in the centre, which had crossed the Petit Morin, was to come back behind the river. His VII Corps being halted in echelon to the right rear of the X Reserve, the wheel of the German Second Army in order to face Paris as ordered by the Supreme Command would thus now be made on its centre instead of on its right as first intended. Its right being thus thrown back, the right flank of the main German line would be protected, whatever wild manœuvre Kluck chose to perform.

Kluck's III and IX Corps had no difficulty in breaking contact with the French and getting away. The 5th Division (III Corps) simply withdrew ; the monograph says, " the night passed quietly everywhere, the enemy did not disturb the retirement in any way." The 6th Division, after beginning to march off, received a counter-order to reoccupy its positions. There was then a certain amount of firing, but by 8 a.m. on the 7th its rear-guard had shaken clear, and, " without loss and without the enemy infantry attempting to follow at any place, it regained touch with its division."

In the IX Corps, after Kluck's order for retirement had been received, the G.O.C., General von Quast, heard first from the 13th Division (VII Corps) that the Second Army was going to attack next day, and then later received Bülow's written orders for the operation, which he prepared to obey. At 6 a.m. on the 7th, he learned that these orders had been cancelled as regards the X Reserve Corps next to him and that it was going back. Quast doubted if he could withdraw his corps in daylight ; but " under cover of lively fire of the whole of the artillery," the 18th and 17th Divisions marched off, each in two columns. The rear-guards of the 18th had a little fighting at one place only, but were clear by 9.45 a.m. " On the rest of the front of the division there was no contact with the enemy whatsoever, so the march was carried out undisturbed." In the 17th Division likewise the greater part retired—certainly " crawling or bent double " to avoid observation—" without difficulty and without loss." Only one company, forgotten in a wood and late in getting off, received long-distance rifle fire, but also suffered no loss.

The I Cavalry Corps (General von Richthofen ; Guard and 5th Cavalry Divisions) covered the western flank of the retirement and endeavoured unsuccessfully to get touch of the II (General von der Marwitz ; 2nd and 9th Cavalry Divisions) ; for this latter corps " had withdrawn northward under pressure of the advancing

British Army and was then drawn by the First Army nearer to the Ourcq front."

Coming now to the movements of Bülow's right: the 13th Division (VII Corps) was marching south to take part in the attack ordered by him—it was actually behind Kluck's IX Corps—when it received the orders to recross the Petit Morin, and it had merely to march back a short distance. The 14th Division, being still north of the Petit Morin, stood fast. In the X Reserve Corps (2nd Guard Reserve and 19th Reserve Divisions) there was some confusion. It received an order to retire at 2 a.m.; it then learnt that the IX Corps and 13th Division were after all preparing to attack; only at 6 a.m. did it hear definitely that the attack was abandoned. However, both of its divisions got clear without fighting, and by 11 a.m. had recrossed the Petit Morin, all except one unfortunate battalion of the 74th Reserve Regiment. This unit, overlooked and forgotten in a wood, was in the course of the day attacked and annihilated, only 6 officers and 87 men surviving. It is claimed that the battalion "blocked the advance of the French 19th Division for half a day." Having arrived on the north bank of the Petit Morin, the 13th, 2nd Guard Reserve and 19th Reserve Divisions dug in under peace conditions; for "far and wide not an enemy was to be seen," and "the day came to an end without an enemy infantryman appearing or even enemy artillery fire falling anywhere on the German lines on the north bank of the Petit Morin."

After the 13th Division and the X Reserve Corps had thus got clear, Bülow considered his right fairly safe, and decided to move the 14th Division (VII Corps) from behind his right to strengthen his centre. At 12.40 p.m. he allowed Kluck's III Corps (5th and 6th Divisions) to continue its march to rejoin the First Army, and by night its two divisions had just reached the Marne; but to ensure that his right was covered, Bülow directed the IX Corps (17th and 18th Divisions) to halt for the night behind the Dolloir stream (shown on German maps as Dollau), which enters the Marne about 33 miles below Chateau Thierry. Thus on the night of the 7th of September (*see* Map) the IX and III Corps, and the two cavalry corps still blocked the gap between Bülow's right and Kluck's force away near the Ourcq, three infantry divisions and three cavalry divisions being aligned from Chezy (below Chateau Thierry) to La Ferté sous Jouarre, the exact section of the Marne towards which the B.E.F. was directed—and where it actually crossed on the 9th.

During the 7th of September the eastern part of the Marshes of

St. Gond and their main passages remained practically unprotected. The X Corps covered the western half of them, but the Guard Corps was east of them, and the passages of the eastern half only were watched by small parties. Beyond a small attack by two French battalions of the 17th Division of Foch's Army, which was repulsed, the French made no offensive movements on this day and Bülow countermanded the attack he had ordered to secure the passages of the marshes. The left of the German 19th Division of the X Corps, however, made some progress in the woods opposite the centre of the corps with the purpose of working round the western end of the marshes. It drove back the outposts of the left of Foch's Army, but at night the successful battalions were recalled. They had suffered a little from artillery fire, but had not been attacked. The Guard Corps remained in position unmolested and immobile. At night Bülow ordered the X Corps also to go back behind the Petit Morin to join the 13th Division and X Reserve Corps, and directed the 14th Division, then moving eastwards from the right of his Army, to fill the gap between the X and Guard Corps and cover the Marshes of St. Gond.

Thus, except for the small offensive of the left of the German 19th Division at the western end of the marshes, the Germans either retired or were quiescent on the 7th. Foch's Army did nothing except make a reconnaissance in force with two battalions. D'Esperey's Army made a short advance towards the ground from which the German III and IX Corps had retired, the left, next to the British, hanging back; and it lost contact with the enemy. The British, though opposed on the Grand Morin by the four hostile cavalry divisions and rearguards, crossed it and made fair progress.

There was more activity on the 8th of September. Bülow, as the enemy was so unenterprising, issued instructions for his right to stand fast behind the Petit Morin, whilst he swung his left forward, with the purpose apparently of continuing the wheel of his Army, so that, as ordered by the Supreme Command, it might face Paris.

Commencing the summary of the German narrative of the 8th, on the right of the German Second Army, the retirement of the Guard and 5th Cavalry Divisions defending the Petit Morin against the right of the British advance is dealt with in seventeen lines :

"The northern bank was little suited to defence. As early as 8 a.m. (British time) British cavalry with artillery drove back the weak outposts at Orly and Villeneuve. Then parts of the 2nd Cavalry Division advanced against the left flank of the British, and the I Cavalry Corps

recovered the northern bank.* Towards 11 a.m., however, the enemy attack was renewed against the Guard Cavalry Division at Boitron and Sablonnières. The commander of the I Cavalry Corps, Lieut.-General Freiherr von Richthofen, found himself obliged at 11.45 a.m. to order a retirement behind the line of the Dolloir [that is to wheel back pivoting on the right of the Second Army to face nearly west instead of south, and leaving a gap on the front]. But the greater part of the 5th Cavalry Division had already withdrawn in an absolutely northern direction over the Marne."

The right (13th) division of the Second Army began the day well. A French battalion which attempted to get possession of the bridge over the Petit Morin at Montmirail was practically destroyed and its 330 survivors captured. Then the French were observed moving round the flank out of field artillery range. They gradually closed in and the 13th Division had to retire and at night was ordered to hold a railway embankment some three miles behind its original front. But the German monograph will not admit defeat. It says :

"The French obtained a success in the evening hours of the 8th of September, not due to their efforts, or to the effect of their weapons, but only to a succession of fateful pieces of bad luck [*Reibungen*=rubs off the green] on the German side. It was confined almost exclusively to an entry without fighting into a gap on the German defensive front."

The narrative shows that some German batteries which were under French heavy gun fire retired to new positions, and their infantry escort followed, thus making a gap in the line which there were no reserves to fill. The French seem to have assaulted at 10 p.m. after the Germans had retired ; finding no enemy they settled down for the night, apparently unaware that they had broken through and were actually in rear of the main line of the German Second Army.

On the front of the X Reserve Corps, next to the 19th Division, there was nothing but artillery fire. The 2nd Guard Reserve Division lost only 2 killed and 18 wounded, and the 19th Reserve Division, 8 officers and 78 other ranks.

In the 19th Division (X Corps) the day passed very similarly. A few French horsemen were seen between 8.30 and 10 a.m., but no infantry. The 20th Division at 10 a.m. was ordered to attack at 12 noon, but, although supported by the corps reserve, it did little more than regain the ground beyond the Petit Morin at the western end of the Marshes of St. Gond, abandoned the previous day. Four battalions, however, managed to cross the westernmost causeway

* It is correct that a German counter-attack from the west brought the British cavalry advance to a standstill.

over the marshes, towards Oyes, practically unopposed. That no more was accomplished is attributed to the fatigue of the troops. At 6.30 p.m. the divisional commander ordered a night attack, but for various reasons it could not be carried out.

The story of the adventures of the 14th Division, which by Bülow's orders was moved from the extreme right to the extreme left of the German Second Army, is almost incredible. Leaving on the evening of the 7th of September, accompanied by a heavy field howitzer battalion, when it arrived at Champaubert at 1.45 a.m. on the 8th, after marching 27 miles during the day, it could get little information, as the X Corps staff was at the moment in the act of withdrawing some of its troops behind the Petit Morin for the night. A detachment of a battalion, two squadrons, a battery, a machine-gun company, and the divisional cyclists was formed under Major Bauer to push on and reconnoitre, as there were not even maps available. It reached Congy, 20th Division headquarters, at 2.35 a.m. and found the divisional staff there in the deepest sleep, but eventually learned that the passages of the marshes which it was sent to secure were already held. Shortly after Army instructions for the 14th Division to make connection with the Guard Corps arrived, and the divisional commander issued orders for an attack to be made across the marshes, under the impression they were passable by infantry. "Actually this was completely out of the question; if any one departed a step from the causeways, he stuck in the mud without hope of rescue." Further, the attack was ordered to cross a line, just north of the marshes, at 6 a.m., which the troops could not possibly reach before 7 or 7.30 a.m. The leading brigade, indeed, was not ready to move off until 8.30 a.m. and did not cross the line mentioned until 9.20 a.m. And, to add to the troubles, the X Corps seized hold of the heavy howitzer battalion. Nevertheless, the leading brigade of the 14th Division crossed the marshes by a single causeway (Joches—Broussy), delayed only by hostile artillery fire and a few snipers, although the French were in possession of the next causeway eastward (Coizard—Bannes). The movement, however, was brought to a stop beyond the marshes by fire, and the infantry was then shelled by its own heavy howitzers. In spite of this, the advance was got going again, and field artillery crossed the marshes to support the infantry; at 6 p.m. the French began to retire. As the Guard on the left of the 14th Division were held up by artillery fire, the further advance was stopped at 9 p.m.

The story of the Guard Corps is to be given in the next volume, but as far as the German account has gone there is nothing to indicate

that on the 7th and 8th of September, 1914, either side acted as if a decisive battle was in progress. Of the legendary fighting at the Marshes of St. Gond there is no trace ; in fact, except for the advance and annihilation of the French battalion at Montmirail and the entry of some French troops into a gap in the front of the German 13th Division, there was no serious contact of the opposing French and German forces. But we have yet to learn the French account.

The wide front assigned to the five divisions of the B.E.F. (*see* Map) as compared with that of the French Fifth Army (d'Esperey) of thirteen divisions, is a feature of the battle of the Marne to which attention has not yet been drawn.

FRANCE AND BELGIUM, 1915

Military Operations, Vol. IV. France and Belgium, 1915. Part II. (History of the Great War, based on official documents by direction of the Historical Section, Committee of Imperial Defence.) By Brigadier-General Sir James E. Edmonds, C.B., C.M.G. Maps and Sketches by Major A. F. Becke. London: Macmillan & Co., Ltd., 1928. 12s. 6d. net. Maps (in separate case), 5s. 6d. net.

THE latest volume of the official account of the British campaigns on the Western Front has followed very quickly on the heels of its immediate predecessor. Two years elapsed between the publication of the two volumes dealing with 1914, another two separated the "First Ypres" volume from that covering Neuve Chapelle and "Second Ypres," but it is only a year since the last named appeared. The shortness of the interval is the more welcome because of the continuity and interdependence of the two 1915 volumes: one wants to read the story of the 9th of May and Loos while the account of the earlier part of the year is fairly fresh in the memory. In reading of the discussions which preceded Loos one has to bear in mind the all-important question of munitions so cogently and succinctly dealt with in the Neuve Chapelle volume. In the main, the two volumes have the same central theme and great lessons—national unpreparedness for war, with the shortage of guns and ammunition which was its chief outcome and which placed the B.E.F. at great disadvantages alike on the defensive and on the offensive. Just as the Germans' superiority in heavy guns had been mainly responsible for our losses of men and of ground at Second Ypres (*cf.* 1915, Vol. I), so it was this factor again which did most to curtail and limit our gains at Festubert and Loos. We had also to fight with inexperienced and partly trained troops and improvised staffs, and far from having any superiority in materials with which to compensate for their inadequate training, our men laboured under disadvantages in material, in heavy guns and their ammunition, in bombs and in other "trench-warfare" implements, which would have handicapped the best trained severely (p. 395). Our means were wholly inadequate to our

ends, therefore the Western Allies could neither take advantage of the opportunity given them by the German decision to make their main effort in 1915 against Russia, nor even do anything effective to relieve the pressure on Russia when disaster threatened their ally (pp. 127-129).

The inadequacy of the means at our disposal, moreover, put us at an additional disadvantage inasmuch as we had to defer to the wishes and views of the French, to embark upon an offensive which from our point of view was altogether premature, and to deliver that offensive at a point where our commanders considered that the tactical conditions were far from favourable (p. 121). Of course it is absurd to judge the British contribution to the Allied effort in 1915 merely by the length of front which we held (p. 132); the number of German divisions opposite our frontage is the truer standard, but even so our unreadiness to pull our full weight left Lord Kitchener with no option but to accept General Joffre's "formula" and to subordinate the B.E.F. to the French G.Q.G. during the operations mainly intended for the liberation of French territory (p. 126).

It is easy enough to see now that for the B.E.F. to undertake a serious offensive in September, 1915, was not warranted by any feature in its situation. Quite apart from the lack of heavy guns and ammunition, the "New Army" formations badly needed time to get experience of being under fire and generally acclimatized to active service conditions before they were asked to undertake so difficult a task as sharing in a big offensive, while the rapid increase in the Army had led to many officers without staff training or experience being pitchforked into positions for which they were hardly properly prepared; efficiency had to be painfully acquired by experience, that is, mainly by finding out what not to do again. Even the old Regular divisions were full of partially-trained drafts and recently-appointed officers, while the successive extensions of the British front had prevented the old formations profiting by the arrival of the "New Army" to get a proper rest and a chance of training and assimilating their drafts. The story of Loos is full of things going wrong from want of experience, such as the inadequate arrangement for the control of the roads in the back area (p. 278), and wisdom after the event can point to many things which should have been done differently. But in justice both to Sir John French and to Sir Douglas Haig it must be realized that after the 9th of May they both saw clearly the unwisdom of another British offensive in 1915 (p. 117), that if the B.E.F. did eventually fight a great battle

which resulted in some 50,000 casualties to very little purpose, this was because in loyalty to our French allies we subordinated our wishes and our better judgment to theirs. Nor was it only on the broad strategical question that Sir John French was over-ruled. Both he and Sir Douglas Haig were convinced that the frontage on which General Joffre was anxious for them to attack was most unfavourable (p. 114). It is interesting that the frontage on which Sir Douglas Haig would have preferred to try an offensive was that of the Third Army south of Arras (p. 121). It is not stated whether either Joffre or Foch were actually acquainted with the Loos frontage which they regarded as so very favourable: possibly they might have been less enthusiastic had they known it intimately. One may well be doubtful whether, with so little artillery and ammunition available to support it, any British attack could have succeeded, even north of the La Bassée canal or against the Wytshaete-Messines ridge, both of which Sir John French suggested as more suitable localities (p. 121). But the story of the battle does show that Sir Douglas Haig's objections to the Loos area were only too well founded.

Perhaps the most unsatisfactory result of the over-ruling of Sir John French's objections to involving the First Army in more than artillery cooperation in a French attack (p. 124) was that all along he seems to have been rather half-hearted and to have doubted the prospects of success: his lack of conviction appears to have somewhat affected his handling of the battle, by making him reluctant to commit his forces too deeply (p. 294). It is this which largely explains his retention in reserve of the 21st and 24th Divisions, "ill-considered and tactically out of date" (p. 397), and the more unfortunate because Sir Douglas Haig was left under the erroneous impression (p. 276) that his views as to their use had prevailed. What might have been achieved if the 21st and 24th Divisions had been deployed, as Sir Douglas Haig proposed (p. 275), in rear of Vermelles, only 2,000 yards behind the assaulting infantry, at day-break on the 25th of September, can only be conjectured. An undeniable initial success had been secured; the opportunity was there but not the reserves who might have exploited it.

Sir Douglas Haig, on the other hand, did not err on the side of misgivings and holding back. After the demonstration on the 23rd of August of the possibilities attainable by the use of gas (p. 152) he became decidedly optimistic, and though the artillery and ammunition were barely sufficient for more than an attack by two divisions, he extended his plans to embrace an attack by six,

because he believed that the use of gas would turn the scale completely in our favour. With the wider frontage attacked there was much less danger of the attackers being checked and overwhelmed, as to some extent they had been at Festubert (p. 79), by a concentration of German guns. But the wider frontage also meant that it was impossible to provide a volume of fire sufficient to destroy effectively the fortified villages, the "strong points," the trenches or the wire entanglement (p. 167). Though much more 18-pdr. and 4.5-inch shell were available than on the 9th of May, 234,000 rounds as against 26,000, the heavy artillery shell only amounted to 22,000, as against the 940,000 provided for the Messines attack of June, 1917 (p. 177), nothing like enough to give the infantry any chance without the gas, as the narrative of the battle repeatedly shows. But to base the plan on the use of gas based it on an unknown factor, and all really depended on that unknown and untried factor proving a great success. The description (pp. 165 ff.) of the fluctuating weather conditions on the night before the attack, of Sir Douglas Haig's dilemma and of his final and fateful decision is extremely graphic, but General Edmonds's account is all the more effective because of its simplicity, reticence and directness.

The main reasons for the disappointing results of Loos stand out clearly from an admirably told story, which goes into considerable detail but never so as to lose the wood for the trees. General Edmonds has the great gift of knowing how to let a lucid and balanced statement of fact tell its own story so well that there is little need for elaborate exposition of conclusions or of the lessons to be drawn. But the lessons are there, and no one who reads the story attentively can fail to realize the why and the wherefore of skilfully presented facts.

The primary reason for the disappointment is that though, despite all disadvantages, despite even the failure of the gas on some parts of the frontage, a substantial initial success was achieved, this was not adequately exploited. Of the undue retention of the "General Reserve," on whose early appearance Sir Douglas Haig and his corps commanders were counting, so much so that no corps reserves were detailed (pp. 183 and 215), and corps commanders were left without a chance of influencing the fight, enough has been said. Even this by itself would not have been so important had not the Germans had time, since the 9th of May, to prepare a second line of defence some way behind their front trenches, themselves more elaborate and formidable than those which had defied the First Army on the 9th of May. A particular feature of this second line

was the very wide and formidable belt of wire, erected at leisure out of sight and range of the British trenches and too far back for the British guns to cut it (pp. 119-120). Of the part it played it is hard to say too much : at one point only, in front of Haisnes, where the 9th Division got into Pekin and Cité Trenches, was any substantial portion of it ever captured, and there, for lack of support, the foothold could not be maintained * ; while the victorious advance of the 15th Division, which achieved more success than any other of the six engaged in the main attack, would hardly have been brought to so disastrous a standstill but for the German defences in front of Cité St. Laurent and Cité St. Auguste. But without defenders the strongest defences are nothing, and during the morning of the 25th of September this second line was almost without garrison, so that had troops been available to push on against it in force and promptly its construction might have been wasted labour.

Troops unfortunately were not available, not merely because the General Reserve was too far back, but because the assaulting battalions, and in many cases their supports also, had been too completely used up in storming the front line to be capable of doing any more. This was largely because the bombardment had achieved so little. In many cases the attackers reached the German lines to find the trenches little damaged, few lanes cut in the wire, the defenders little reduced in numbers or moral and able to inflict such crippling casualties before they were overwhelmed that the assaulting battalions were virtually put out of action. Opposite Hulluch, for example, the 10th Gloucestershires and 8th Royal Berkshires, the " K3 " battalions which had replaced the Guards in the 1st Brigade, did splendidly (p. 212), but so few survived, especially of the Gloucestershires, that they were quite unequal to carrying out the rest of their programme. The same applies to the 7th Division, to the 26th Brigade of the 9th Division, and, though to a less degree, even to the leading battalions of the 15th and 47th Divisions, on whose frontage conditions had favoured the gas.

This virtual annihilation of most of the assaulting battalions made all the more vital their prompt support and reinforcement. The tragedy—it is nothing less—of the 21st and 24th Divisions thus becomes a turning-point in the story. All the mass of legend and misrepresentation which has gathered round their performance must give place now to the authentic version. General Edmonds

* The 7th Division also got into the second position near Cité St. Elie, into which village some of the 2nd Queen's actually penetrated (p. 232), but this lodgment was on too small a scale to offer any serious possibilities of exploitation.

tells their story with clarity, candour and sympathy, and his summary of their part in the battle (pp. 343-345) is a masterpiece of compression and comprehension. Poor staff work, especially over road control in the back areas, was one potent cause of trouble (p. 278). The inexperience of officers and men alike, their ignorance of what was expected of them and of how to do it, most marked perhaps in the case of the 21st, was an even more influential factor ; as it was also with the 11th Division at Suvla. The delay in placing them under General Haig's orders (p. 280) delayed their advance till long after the favourable moment for their employment was over. Artillery support was difficult to arrange, and the final attack by the 24th Division was virtually unassisted, the bombardment of the German second line being " spasmodic and unsystematic " (p. 317). This final attack had dwindled down from an advance of twenty-four battalions to one of six, the 72nd Brigade and two battalions of the 71st ; it had really no chance whatever of success, but it was nevertheless something of which seasoned veterans might well have been proud, and no shadow of discredit can rest on these troops. The 63rd Brigade, whose failure to hold Bois Hugo was due to inexperience rather than to panic (p. 323), is very fairly dealt with, though the fact that two companies of the 8th Somerset L.I. and some fragments of the other battalions did hold on to Chalk Pit Wood, despite the retirement of the rest of the brigade, is perhaps rather suggestive.

But in the handling of reserves it was not the " General Reserve " only of which more should have been made. At two points certainly troops were uselessly expended in renewing frontal attacks on positions which had already repulsed at least one assault, when on their flanks gaps were open and crying out to be utilized. The left brigade of the 9th Division failed to storm the trenches just north-west of the Hohenzollern Redoubt, but if its support battalions had been put in, as one battalion commander suggested (p. 192), behind the successful 26th Brigade on the right, they might have outflanked the trench there was no possibility of carrying by the frontal attack on which the corps commander, too far back to judge of the tactical situation (p. 242), nevertheless insisted. An even more flagrant case is that of the 2nd Brigade opposite the " Lone Tree " trenches (pp. 210 *ff.*). With gaps on both flanks, through which the brigade supports, let alone the divisional reserves, might have been moved round to take the uncaptured trenches in flank and rear, not only were the survivors of the assaulting battalions ordered forward a second time against unshaken defenders but the supports were thrown away in a fresh frontal assault, and then the division capped

this by sending up two reserve battalions to repeat the futile effort. Ultimately, by the enterprise of an individual battalion commander rather than by any action of the higher command, the German resistance was overcome some nine hours after the first assault (p. 220), but by that time not only had more than a thousand quite unnecessary casualties been incurred but the whole attack of the 1st Division was fatally and irretrievably disorganized. It is hardly too much to say that adequate handling of the situation should have resulted in the reserve battalions of the 1st Division arriving on the Lens—La Bassée road intact and fresh well before mid-day, with Hulluch theirs for the occupying and the German second position thence to Bois Hugo practically undefended. It is easy to see this now, but even in September, 1915, with the memory of the 9th of May, 1915, still fresh, the futility of renewing frontal attacks after another ten minutes' bombardment had surely been only too amply demonstrated. General Capper of the 7th Division at any rate had learnt the lesson, as his handling of a similar situation on his front clearly shows (p. 232).

Other things also contributed, if to a less degree, to the failure to improve an opening, the mere creation of which amply justifies Sir Douglas Haig's plans for the attack (pp. 265–266). The arrangements for collecting information and transmitting it to the higher commanders did not result in those in rear having any accurate idea of the exact situation in front or of its possibilities. Losses were not realized, much more was believed to have been accomplished than was actually the case : troops were therefore asked to do things quite beyond their powers (p. 282). The difficulty of recognizing landmarks and keeping direction in a featureless country (p. 201, f.n.) was considerable and resulted in inaccurate reports and ideas. It must be admitted, too, that the standard of staff work and of leadership was poor, but this was only natural : far too few officers had had staff training in peace, fewer still practice in staff duties (p. 394), fewer still of those in command of divisions and brigades had ever handled more than a fraction of their new commands before a few weeks back. Another important factor was the German superiority in bombs, which gave them a great advantage in the trench fighting into which the battle gradually degenerated (p. 264). If they had fewer guns they had far more ammunition and used it freely and effectively, but their local counter-attacks, as, for example, on Pekin Trench (p. 248) and at the Hohenzollern (p. 369), owed even more to their bombs than to their guns. They had more bombs and better bombs, and the British were terribly handicapped in facing

them. But it says much for the spirit of the B.E.F. that on the whole Loos did not leave the troops seriously depressed; the failure to do more was generally attributed either to bad luck or to accidents (p. 399); the 21st Division declared, "We did not understand what it was like; we shall do all right next time" (p. 335)—and they made good their words.

Loos, if far the most important topic in the volume, of which it takes up just two-thirds, is not the only thing. Of the remaining pages the disastrous failure at Fromelles and Rue de Bois on the 9th of May takes up forty, Festubert, with its "tantalizing" (p. 77) but rather more encouraging results, another forty, the rest of the book being devoted to an admirable summary of the various minor actions of the summer: Givenchy (15th and 16th of June), Bellewaerde (16th of June), the *flammenwerfer* attack at Hooze (30th–31st of July), the successful counter-attack of the 9th of August, or to the discussions and deliberations which preceded the decision to attack at Loos. This last topic is most instructively handled; the divergence of British and French ideas is well explained—it was perhaps the period when our relations with our Ally were most strained, while the whole strategy of the Gallipoli venture is neatly dealt with by implication (p. 228). The utter want of coordination between the Allies is emphasized, and the consequent "distracted strategy and disconnected offensives" (p. 129), a fault by no means cured in 1917; "frittering" away valuable resources was as prevalent as in the days of the younger Pitt, and with less excuse.

Of the French operations both in May near Arras, and in the bigger dual effort of September in Artois and in Champagne, excellent summaries are given. It may be noticed that though far better off than us for guns and ammunition (p. 135), they achieved little more in May and nothing like so much in September in Artois or even in Champagne, proportionately to the effort expended. As to the 9th of May one thing stands out. The inevitable postponement of the renewal of an offensive after Neuve Chapelle was invaluable to the Germans; the delay, always more advantageous to the defence (p. 119), allowed them to convert what in March had been but "light field defences into fortifications of a semi-permanent character which required heavy H.E. shell to breach them" (p. 13). They had also been warned by their experience at Neuve Chapelle to increase the garrison of the sector and to reduce the frontage held by each battalion from 3,000 yards to 2,000, so that without any appreciable increase in the powers of the attack—much of the British ammunition, indeed, was exceedingly faulty (p. 41)—we were

assaulting much stronger and better prepared defences. Festubert again saw a change in method, the abandonment of the short and intense bombardment for the slow and systematic, a change approximating to the adoption of siege-warfare methods, of the need for which Sir Douglas Haig seems to have been convinced after Loos (p. 290).

Of the qualities which characterize General Edmonds' work some mention has been made in passing. His skill in selecting, arranging and expressing his points seems, if anything, to be increasing. He is always clear, always judicious; he allows himself an occasional flash, as when he says (p. 91) that "the enthusiasm of inventors and their success in demonstrating behind the lines was far in excess of the efficiency of their 'gadgets' when tested in face of the enemy." He has set himself a high standard in his previous volumes, and here he has certainly maintained it to the full. The same may be said of Major Becke's maps and sketches. Of the latter there are over forty, and they are quite invaluable in elucidating the story. If sometimes there is almost too much detail, and if some of the detail is too small to be easily made out, this is hardly a serious blemish. There is actually a trifling discrepancy between Sketch 41 and the text on p. 383 about the position gained by the 35th Brigade at the Quarries on the 13th of October—one is almost relieved to find it; on any doctrine of averages there should be many such trifles, not one only. We may perhaps have some time to wait for the story of the Somme, but the high standard of work both of text and maps which distinguishes this and the preceding volumes, could only be achieved by careful research and sifting of conflicting evidence, and one must be patient but hopeful.

THE FRENCH OFFICIAL ACCOUNT OF THE DARDANELLES CAMPAIGN *

To describe the operations in the Near East, at the Dardanelles and on the Balkan front, the Historical Section of the French General Staff is devoting two volumes. The first of these, which is now available, contains the account of the *Corps Expéditionnaire d'Orient* at Gallipoli and takes the operations based upon Salonika as far as August, 1916. The Gallipoli campaign occupies about a quarter of the text, and the documents relating thereto one of the three volumes of "Annexes." There are eighteen maps, two panorama sketches and a reproduction of an aeroplane photograph of the Kereves Dere region.

In the preface it is emphasized that, as the campaigns in the Near East were fought by Allied Armies, a general description of the operations is necessary for the proper understanding of the part played by the French forces ; but the compilers are careful to add that more light will be thrown upon events when the official accounts of other countries are available. So there is no pretence that a full-length history of the Gallipoli campaign is to be found in this volume.

References to British documents and books are singularly few. As may be expected, the most frequent quotations are from Sir Ian Hamilton's despatches, and his "Gallipoli Diary" is also drawn upon. There are also references to the report of the Dardanelles Commission, Sir Julian Corbett's "Naval Operations," the French edition of Sir George Arthur's "Life of Lord Kitchener," and to the *Fünf Jahre Türkei* of Liman von Sanders. No attempt has been made to trace the movements of the opposing Turkish forces or to describe the fighting from the enemy's point of view.

As we know, the French official narratives of the operations on the Western Front are written on a broad scale in which the army

* See *Les Armées Françaises dans la Grande Guerre*. Tome viii. *La Campagne d'Orient (Dardanelles et Salonique)*. Vol. i. Paris, *Imprimerie Nationale*. Published, 1928, but dated 1923.

corps is taken as the unit. Here one is given a detailed description of the French troops in battle, for only two of their divisions were employed on the Gallipoli peninsula. Several French writers have already described the fighting on the French portion of the Helles front, but this continuous description of the operations, complete with orders and reports, is of much greater value. Of especial interest is Colonel Ruef's account of the Kum Kale landing, a purely French operation which included one very unusual incident. It may be surmised that the Turks who came forward so readily to surrender on the 26th of April thought better of it when they found themselves confronted by African troops.

It is obvious that from the inception of the campaign the French were faced with much the same problems as we were. They also had difficulties of their own. General Joffre refused to contribute to the C.E.O. any units in, or intended for, his command. So the necessary troops were hurriedly assembled by combing the dépôts of France and North Africa, provisional regiments being formed of infantry of the line, Zouaves and Foreign Legion, Senegalese and Colonial infantry. The artillery and the ancillary services were all new units formed in the same way. When General d'Amade asked his Government for Admiral Ronarch's brigade of *fusiliers marins*, veterans of the 1914 fighting in Belgium, to stiffen his new untried formations the request was refused. He was promised reinforcements, up to the strength of one division, of the same quality as the troops already under his command.

The untried drafts which replaced the heavy French casualties, the abnormal losses in officers, and the shortcomings of the young and perfunctorily trained Senegalese troops caused great anxiety to the French commanders throughout the campaign. On the 7th of May—during the second battle of Krithia—d'Amade telegraphed for larger supplies of gun ammunition which was the more essential as his infantry was suffering such severe losses. By the 11th of May, 1915, the French casualties amounted to 246 officers and 12,625 other ranks. The French position on the right of the line at Helles—the troops were committed to frontal attacks upon the strong Turkish defences south and south-west of Kereves Dere, and were exposed to the fire of the batteries on the Asiatic shore—was certainly no easy one.

On the 22nd of May General Gouraud wrote to Paris to say that it was necessary to regroup Senegalese and Colonials in composite battalions instead of regiments, and that more Europeans were required from France to enable this to be done.

From the outset the French were very apprehensive of the effect which failure, or even delayed success, at the Dardanelles would have upon the Moslem world. To this, and to the material and moral effect produced at Sedd el Bahr by the fire of the Turkish heavy batteries on the Asiatic side, may be ascribed the great number of plans and appreciations prepared by various French experts with a view to solving the Dardanelles problem. These documents are published in the "Annexes," and, although they cannot be said to have had any bearing upon the conduct of the campaign, are of considerable interest. The French Government had a multitude of counsellors—some of them counsellors of perfection.

Having the temper of the Moslem population of North Africa as his ever present problem, Colonel Hamelin, chief of the African Section of the French General Staff, voiced his apprehensions on the 15th of March. Doubting the success of the Dardanelles enterprise he urged that the rôle of the C.E.O. should be more clearly defined: not a question which could be answered at the moment for we were awaiting the result of the attack by the Allied fleets which did not take place till the 18th of March. Towards the end of February Colonel Maucorps, head of the French mission in Egypt and former attaché at Constantinople, had disclosed his views at the request of Sir John Maxwell. He favoured a landing on the Asiatic shore, combined with a demonstration in the gulf of Saros. On the 16th of March, after M. Millerand, the French War Minister, had pointed out to d'Amade the importance of Bulair, the French general mentioned the advantages of landing in the Adramyti gulf, on the Asiatic coast north-east of the island of Mytilene.

Maucorps told Hamelin on the 12th of April that he considered the Dardanelles operation invited disaster. If the fleet could not get through the Straits alone, it would never do so with the help of the army. To give up the military project would do little harm, because the check to the fleet on the 18th of March had had little effect upon the Moslem peoples. Let the fleet continue to menace the Straits and the army land at Salonika. This might well solve the Balkan problem in favour of the Allies, and the Allied contingents might then invade Austria-Hungary—a decisive operation. In the text of this volume these "suggestions" are lightly dismissed as carrying little weight.

After the second battle of Krithia Commandant de Bertier de Sauvigny, attached to British G.H.Q. at the Dardanelles, gave his views to Hamelin, mentioning Bulair and the Asiatic side,

"which was now denuded of Turkish troops and invited attack," as suitable landing places for a fresh operation.

The submarine menace which became formidable in May drew a further "note" from the indefatigable Colonel Maucorps. He suggested that twenty French submarines should be sent out to prey upon the Turkish communications in the Marmora; that the big warships be kept in properly defended harbours, Mudros and Mytilene, until such time that it was decided to make another naval attempt upon the Straits; and that a thorough search be made of the Ægean coasts for the suppression of the enemy's submarine bases. For this last operation he advised the creation of a separate naval command.

In June Gouraud sent to Paris a note prepared by Captain Boissonais, political officer attached to the C.E.O., who stated that the bringing in of Bulgaria on the side of the Allies was essential to success.

Colonel Braquet, attaché at Athens, had visited his compatriots at Sedd el Bahr early in the month. He sent home a long appreciation on the 18th of June. Bulair was worthy of consideration in spite of the obvious difficulties. Once masters of the isthmus the Allies could use a Decauville railway for transporting small submarines across to operate in the Marmora. Bulair was preferable as yielding more rapid results, but a landing at Kum Kale was less difficult and the C.E.O. might be relieved in order to take part in a new operation there. Other points on the Asiatic coast merited consideration, notably Alexandretta. He concluded by pointing out that the Dardanelles was now the right flank of a battle line with its left on the North Sea, and urged the advantages of a united command. At the same time Gouraud informed M. Millerand that the expected British reinforcements were not strong enough for a landing on the Asiatic coast, for which operation ten divisions and plenty of cavalry would be required.

As soon as he succeeded General Gouraud in command of the C.E.O., General Bailloud began his continuous plea for operations which would dispose of the Turkish batteries on the Asiatic side of the entrance to the Straits. This resulted in the preparation of a French plan for landing and occupying a strong bridge-head; but the more elaborate schemes for operations in Asia Minor which soon took precedence, and were only dismissed in September when Bulgaria began to mobilize, may now be outlined.

Still fearful for French prestige among the Mahommedans of North Africa, on the 10th of July Hamelin had suggested that a new

effort be made on the Asiatic coast, preferably at Besika Bay. Surprise was essential. He would use the two French divisions which should be relieved at Helles by the British, two new French divisions from home, and the three expected British divisions—the whole under French command but operating under the “*directions générales*” of Sir Ian Hamilton. Chanak would be the objective.

General Joffre's invited opinion, given on the 19th of July, is of particular interest. He had not studied the Dardanelles problem, but said that the Allied entry into Constantinople would not win the war, though it would be a considerable step towards doing so. At this time sufficient men and material could not be spared from France, where the Allies were “*a la veille d'événements importants*,” to prepare such an offensive as was necessary. Gallipoli had already been too great a drain upon the Western Front, especially in heavy artillery. But there should be a change in the situation by the end of September, and, meanwhile, the British reinforcements would not only enable the French to maintain their positions on the peninsula, but also to get a footing on the Asiatic shore. He was emphatic that ample forces must be used when the blow was struck, and that a French general should command on one side or other of the Straits.

The first appreciation prepared by General Sarraill has already been published by him.* He had been superseded in the command of the French Third Army on the 22nd of July and had just accepted under certain conditions, the command of the contemplated *Armée d'Orient* when he prepared his note dated the 11th of August. He suggested Asiatic operations at various points, going as far afield as Smyrna and Alexandretta, and, as an alternative, a landing at Salonika to help the Serbs.

Joffre promptly disapproved of any Asiatic adventure which was not aimed directly at Constantinople, and would not admit Salonika, on account of political reasons and the lack of railway facilities. The scheme he put forward on the 18th of August provided for the employment of fourteen divisions (ten British, two French and two Italian) on the peninsula, and, on the Asiatic side, six: four French and two British under a French general. He would land at Besika Bay and advance on Chanak and Chardak, opposite the town of Gallipoli; the chief effort on the peninsula would be in the direction Sari Bair—Maidos—Gallipoli. He suggested some time in October for this grand offensive which should not be undertaken unless the situation on the Western front permitted

* See *Mon Commandement en Orient*.

such a diversion of force, and the necessary shipping, land transport, and disembarcation material could be provided. He mentioned a third indispensable condition—that the three Allies should be in full accord—but was informed only a week later that Italy would not consent to participate.

Towards the end of August, when the Anzac-Suvla operations were ending, Sarraill was asked for his views on the vicinity of Bulair as a landing place. He preferred the bottom of the gulf of Saros, or Ejelmer Bay whence he would strike direct at the Narrows, but thought that the weather would now interfere with such operations. As an alternative he again suggested the Asiatic side.

Having definitely decided on the formation of an Army for fresh operations on the Asiatic shore of the Straits, the French Government was now endeavouring to arrange for the necessary British cooperation, whilst its General Staff drew up plans. The manner in which these new measures affected the Allied commanders and their forces on the Western Front is touched upon in General Sarraill's book, and in our own official history of the military operations in France and Belgium in 1915. It is naturally dealt with more fully in the French official account of that year. Two complete corps were counted upon from Joffre's command, but on the 1st of September he could only promise four divisions without any higher organization, and these not until October. As always his first consideration was "*la défense du territoire national.*"

The correspondence which led up to the Calais Conference on the 11th of September is here reproduced. As we know, Great Britain agreed to contribute two divisions—after the Loos offensive should have been brought to a conclusion. These troops were intended to relieve Bailloud on the Gallipoli peninsula. After the conference Joffre still showed his reluctance to provide his quota and warned the French Government against undertaking an offensive in a new theatre without adequate forces or due preparation. But proposals for an offensive on the Asiatic side of the Straits were soon to be shelved. Owing to the imminence of war with Bulgaria one French division was dispatched from Gallipoli to Salonika at the end of September.

General Brulard, now in command at Sedd el Bahr, was left with the inferior elements of the C.E.O. His battalions were all composed of Colonials and Senegalese, and he put forward suggestions for the complete relief by the British of the French troops on the peninsula. Then arose the question of the evacuation of

Gallipoli. Lord Kitchener's views on this point and on the Alexandretta project, reproduced in these pages by the reports of Colonel Girodon, the French Chief of Staff at Sedd el Bahr, are already familiar to us. Brulard expressed himself as against evacuation, although so eager for his own relief.

Made Commander-in-Chief of the French Armies on the 2nd of December Joffre supervised the disposal of the troops in the final stages of the French withdrawal from the peninsula. During this month their forces at Helles dwindled to one brigade and some artillery for the Senegalese were brought away under special arrangements. At the beginning of 1916 the French were all relieved and thus the last elements of the C.E.O. were dissolved.

According to the figures given, France sent 1,850 officers and 79,000 men to the Dardanelles, comprising a corps of two divisions with reinforcements. Losses in killed, wounded, and missing amounted to 573 officers and 26,431 other ranks. The 90 guns—exclusive of trench mortars—in action used 506,570 rounds, and nearly sixty-five million rounds of S.A.A. were expended. Thirty-one aeroplanes, one battleship, one mine-sweeper, four submarines, and several transports and other craft are included in the list of naval losses. The total of the casualties to naval *personnel* is not given.

THE AIR EXERCISES

BY MAJOR OLIVER STEWART, M.C., A.F.C.

THE widely published reports stating that the recent Air Exercises demonstrated that London could not be defended against air attack were in many instances pulled out of truth and coloured to make sensational reading. In actual fact, the Air Exercises this year showed quite clearly to all those who followed them closely that in good weather a sensible measure of defence against air attack could be afforded to London by well-equipped fighter squadrons. This was one of the most important and most encouraging points emphasized by the Exercises. Less encouraging but hardly less important were the revelations incidental to the Exercises about the performance of our fighting aeroplanes and about the plans for minimizing the effects of gas upon the civil population.

Before considering these three main points, the power of defence of well-equipped fighter squadrons, the present performance of British fighting aircraft and the measures for minimizing the effects of gas bombing upon the civil population, there is one feature of the Air Exercises which so obsesses the layman that it is necessary to deal with it. This is the probable effect upon London and Londoners of the attacks made during the Air Exercises had they been made in earnest by a real enemy.

The Air Officer Commanding the Air Defences of Great Britain took pains to emphasize again and again that the Exercises were not intended to test the defences of London, but only the operation of individual units engaged in those defences. The distinction is subtle and need not be taken too much notice of, for it is clearly one of those official statements designed more for reasons of policy than for purposes of lucid explanation.

What, then, would have been the result of an actual contest between the forces of Eastland and Westland? First of all, unfortunately for our professional sensationalists, London would not have been destroyed nor would every one in London have been

gassed. London would have been badly shaken and it would have had a large casualty list, but without a shadow of doubt it would have been able to carry on its work. With the vexed problem of the effect of gas bombs I am not competent to deal, but when we know that the total weight of bombs carried by all the Eastland bombers, only a small proportion of which reached their objectives, was 202 tons, and when we remember that part of this would certainly have been devoted to H.E. bombs, the amount of gas that could have been released on London, when the high proportional weight of the containers is taken into account, could not have been sufficient to put London out of action. This statement would hold good even if the new gases are as effective as the chemists say they are and if the wind and weather had favoured the attackers.

But Eastland's attack must not be regarded, from the other extreme, as totally ineffectual or as about as effectual as the feeble attacks in the war of 1914-1918. Eastland's attack did sufficient moral and physical damage to be fully justified according to the economics of air war. It can only be said that it did not put London out of action and that it would not have had the often-quoted effect of making the civil population bring pressure to bear on the Government to sue for peace.

And here, as a subsidiary issue to the amount of damage done, arises the question of whether in future wars the population of cities will be bombed by night and day, or whether, in accordance with Mr. Spaight's arguments, belligerents will come to some arrangement by which the civil population escapes. Let the advantages and disadvantages of bombing civilians be examined quite bluntly. No country would bomb civilians with women and children if it could avoid doing so without jeopardizing its chances of victory. But countries at war always believe that some heavenly duty is theirs and that any measures are justified to fulfil it. A country at war feels like a man caught by a gang of cut-throats in a lonely country lane. He feels that justice is on his side and that the conditions are such that any way of escape is justified.

There are military objectives in towns—centres of organization, distribution and research—which are of as great military importance as, say, ammunition dumps in the field. If the choice lies between two objectives of equal military importance, one in a town and the other in the field, it is clear that it is in many ways better to choose the objective in the town. Bombing is not always accurate. If a bomb misses its target in the field, be it ammunition dump, gun emplacement, concentration of troops, or aerodrome, the probability

is that the money and thought spent on producing the apparatus—airplane, sights, pilot, gunner and so on—for launching the bomb and for the bomb itself will be wasted.

If the objective in the town is chosen and the bomb misses its mark, it is likely that it will still do some damage. It may kill some people or damage or bring down buildings. In any case it will probably do some definite hurt to the enemy, and so will not be entirely wasted.

Now it is one of the facts of civilization that the directive elements tend to herd more and more closely together. London is not only spreading outwards, but it is also spreading upwards. The number of people to the square mile is increasing layer on layer. And the more this number increases the more complex becomes the machinery which enables them to support life and to do their work. And again, as the machinery becomes more complex so it becomes more difficult to modify it quickly to suit changing conditions and more easy to throw it out of gear.

Presented to the bombing machines of an enemy bent upon destroying a country's ability to carry on in a disciplined, effective manner there are two objectives—the objective in the field and the objective in the city.

The objective in the field can be destroyed if the bombing is sufficiently accurate, and the enemy will have had his strength reduced by precisely that much. But if the objective in the town is destroyed the enemy's strength may have been reduced by more than the actual objective. A pronounced moral effect may have been caused among the people living around the objective, which may help to weaken the enemy's government or to affect his supplies. It is even possible that a panic might be caused if the bombing were sufficiently heavy and sufficiently prolonged. Such a panic might have, for the attacker, most far-reaching and valuable results. The choice, then, is one about which few commanders could afford to hesitate. The town is the ideal objective for the bombing airplane. It is a pity, but it is so. Some writers, among them Mr. J. M. Spaight in his "Air Power and War Rights," have claimed that the killing of women and children, either by accident or design, stiffens the resistance of the relatives and fellow-countrymen of those women and children. There is truth in this, and, as has been suggested, if the women and children could by any means be avoided in the bombing of cities, every commander would avoid them. But the city presents far too valuable a target for it to be neglected because incidentally and accidentally women and children may be killed.

In the cities are the aeroplane and battleship drawing offices, the laboratories, the research workers. In fact the very sources and fountain heads of successful modern war are in the cities. They are piled, too, in many-storeyed buildings which could not have been more suitable for bombing if they had been especially designed for it. However humane a commander he could not neglect such objectives.

One must admit once and for all, therefore, that if there were a war London would be one of the enemy's chief objectives; and, except New York, London is of all objectives in the world far the most suitable for the air bomber. Its complexity, area, form of construction and contents make it the ideal target.

It is then essential that the air defence of Great Britain should be concentrated on the defence of London and large cities. Let me introduce the three main points of this discussion by sketching briefly how that defence is at present constituted.

There are first of all the means for locating hostile aircraft. These, so far as the ground is concerned, start at the coast line with the observer posts manned by special constables with simple plotting instruments. In addition, mechanical listening posts and listening posts manned in the ordinary way are employed, and for night work searchlights. This might be described as the first ring of the defences. The next ring is formed by the A.A. guns, and the final ring by the balloon barrage. Above all these are the fighting aircraft. The system is almost self-explanatory. The observer posts report the approach of hostile machines by telephone to central clearing stations, and from these stations the reports are distributed to the various operations rooms. In these rooms the movements of the aircraft are plotted by means of small symbols on large scale maps. From a small balcony running round one side of the room officers directing operations can watch the progress of events on these maps. The fighter squadrons are then ordered up and given instructions as to where to look for the raiders and at what height.

This, in skeleton, is the system. It depends very largely upon the proper working of the telephone system and upon the accuracy of the reports from the observer posts. In this year's Exercises more latitude was allowed to officers commanding in operating and in controlling their squadrons than they had last year. Incidentally, I suggested in my article upon last year's Exercises that more latitude should be allowed the commanders, and in 1926, when in the *Army Quarterly** I first proposed the institution of these manœuvres, I

* See "Air Manœuvres," *Army Quarterly*, October, 1926.

gave a rough idea of how this could be arranged. This year, subject to the general direction of the Air Officer Commanding the Air Defences of Great Britain, the Eastland and Westland commanders were allowed to operate their commands in any way they thought fit. This, indeed, was the main difference between the Exercises of 1928 and the first Exercises in 1927.

The Exercises threw a certain amount of light upon ten main subjects. These were : coordination of air and ground defences, aerodrome discipline, climbing in formation and high altitude flying requirements, issue of orders, spotting of hostile aircraft, fighting tactics, intercommunication problems, coordination at night, ground signals and organization of the operations rooms. The Exercises occupied the time between 6 p.m. on the 13th of August and 11 p.m. on the 16th of August, although they were suspended each day from 9 a.m. to 6 p.m. This suspension was necessary to avoid congesting the telephone lines when these were required for business purposes.

The general idea of the Exercises was that Eastland, a Continental Power whose basis of operations was situated in the north of Europe, was at war with Westland whose capital was London. The Eastland forces were under Air Vice-Marshal Sir John Steel, and consisted of the units of the Wessex Bombing Area, No. 1 Air Defence Group, No. 503 Bombing Squadron and the Night Flying Flight. The Westland forces were under Air Vice-Marshal Sir Robert Brooke-Popham and consisted of the units of the Fighting Area, 1st Anti-Aircraft Battalion, R.E., and Air Defence Formations, T.A.

The Eastland squadrons totalled 13 and were as follows :

(1) *Day Bombers.*

<i>Squadron.</i>	<i>Station.</i>	<i>Officer Commanding.</i>
No. 39 (B) Squadron. (D.H.9 A)	Bircham Newton.	S/Ldr. H. V. Champion de Crespigny, M.C., D.F.C.
No. 207 (B) Squadron. (Fairey 111 F)	Eastchurch.	W/Cdr. J. B. Graham, M.C., D.F.C.
No. 11 (B) Squadron. (Horsley)	Netheravon.	S/Ldr. P. H. Cummings, D.F.C.
No. 12 (B) Squadron. (Fox)	Andover.	S/Ldr. T. E. Salt, A.F.C.
No. 100 (B) Squadron. (Horsley) (less one flight)	Andover.	W/Cdr. L.T.N. Gould, M.C.
No. 605 (B) Squadron. (D.H.9 A)	Manston.	S/Ldr. J. A. C. Wright.
No. 600 (B) Squadron. (D.H.9 A)	Lympne.	S/Ldr. The Rt. Hon. F. E. Guest, P.C., C.B.E., D.S.O., M.P.
No. 601 (B) Squadron. (D.H.9 A)	Lympne.	S/Ldr. Lord E. A. Grosvenor.
No. 503 (B) Squadron.	Waddington.	W/Cdr. Hon. L. J. E. Twisleton-Wykeham-Fiennes.

(Squadrons—9.)

(2) *Night Bombers.*

<i>Squadron.</i>	<i>Station.</i>	<i>Officer Commanding.</i>
No. 9 (B) Squadron. (Virginia)	Manston.	W/Cdr. C. C. Durston.
No. 7 (B) Squadron. (Virginia)	Worthydown.	W/Cdr. C. F. A. Portal, D.S.O., M.C.
No. 58 (B) Squadron. (Virginia)	Worthydown.	W/Cdr. E. W. Norton, D.S.C.
No. 99 (B) Squadron. (Hyderabad)	Upper-Heyford.	W/Cdr. B. E. Smythies, D.F.C.

This was the first occasion the Squadrons of the Auxiliary Air Force had taken part in the Air Exercises, and their remarkable proficiency was one of the most satisfactory features of the Exercises.

The Westland squadrons totalled 12, and were as follows :

No. 29 (F) Squadron.	North-Weald.	S/Ldr. M. L. Taylor, A.F.C.
No. 56 (F) Squadron.	North-Weald.	S/Ldr. A. Lees.
No. 19 (F) Squadron.	Hornchurch.	S/Ldr. H. W. G. Jones, M.C.
No. 111 (F) Squadron.	Hornchurch.	S/Ldr. K. R. Park, M.C., D.F.C.
No. 23 (F) Squadron.	Kenley.	S/Ldr. A. G. Jones-Williams, M.C.
No. 32 (F) Squadron.	Kenley.	S/Ldr. R. B. Mansell, O.B.E.
No. 3 (F) Squadron.	Biggin Hill.	S/Ldr. E. D. Johnson, A.F.C.
No. 17 (F) Squadron.	Biggin Hill.	S/Ldr. A. R. Arnold, D.S.C., D.F.C.
No. 1 (F) Squadron.	Northolt.	S/Ldr. E. O. Grenfell, M.C., D.F.C., A.F.C.
No. 41 (F) Squadron.	Northolt.	W/Cdr. F. Sowrey, D.S.O., M.C., D.F.C.
No. 25 (F) Squadron.	Hawkinge.	S/Ldr. W. H. Park, M.C., D.F.C.
No. 43 (F) Squadron.	Tangmere.	S/Ldr. C. N. Lowe, M.C.

The Ground Defences comprised the following :

<i>Unit.</i>	<i>Peace Station.</i>	<i>Headquarters Camp.</i>
1st A.A. S/L Bn., R.E.	Blackdown, Farnboro, Hants.	Near Redhill.
ESSEX A.A. S/L Group.	Drill Hall, Ongar Rd., Brentwood, Essex.	Hornchurch or Warley.
SURREY A.A. S/L Group.	145, London Rd., Kingston-on-Thames.	Kenley.
KENT & MIDDLESEX A.A. S/L Group.	Pier Approach Rd., Gillingham, Kent.	Biggin Hill.
26th A.A. Searchlight Battalion.	Duke of York's Headqrs., Chelsea, S.W.3.	Edenbridge.
27th A.A. Searchlight Battalion.	46, Regency Street, London, S.W.1.	Orpington.

The operational area by day was bounded by a line roughly joining Manningtree, Stevenage, Chesham, Frensham, Petersfield and Havant, and on the other side by the sea. By night, a slight reduction in the size of the operational area was made and it was assumed that a balloon barrage covered the Thames estuary area from Chatham and Orpington and north to Purfleet and South Benfleet. All bombing attacks were made from the sea.

The fighter squadrons operated mainly from their normal

aerodromes. A number of selected points were arranged in and around London, any of which the A.O.C. Eastland Air Force could select as his objective for any particular raid. At these objectives camera-obscuras, fitted with wireless reception apparatus, were placed. The camera-obscuras were used to record the results of the bombing in exactly the same way as last year. Aircraft transmitted a wireless call sign, and in addition fired a red Verrey light by day and showed a steady white light by night to indicate the instant at which they would have dropped their bombs.

The observer posts were manned between 6 p.m. and 11 p.m. daily and Westland's intelligence system during the remaining hours of the operations was provided by Eastland sending out details of course, position, height and number of its own machines. This was the only entirely artificial link in the chain, and it was, for many reasons, unavoidable.

At night a number of precautions had to be taken to reduce the risk of collision. All fighters used their navigation lights throughout the Exercises. Bombers used their navigation lights except when over 5,000 feet on their inward journey, but, if a bomber approaching its objective with lights out saw a fighter approaching at such a direction and height that a collision was possible, it was instructed to switch on its navigation lights. Certain restrictions on the use of clouds had also to be made in order to avoid risk of collision, but these were not such as to preclude altogether the tactical use of clouds. The operations were confined to a space between 2,000 and 20,000 feet above sea level, but aircraft not equipped with oxygen apparatus were not allowed to operate above 16,000 feet.

During the Exercises the searchlight positions were manned by the bulk of the Territorial A.A. searchlight units which form part of the defences. The first A.A. Searchlight Battalion (Regular) was also cooperating. The searchlight detachments camped out at the searchlight positions and thus the searchlights were being worked under conditions similar to those of active service. The A.A. guns were not manned because the A.A. artillery units were away at their annual practice camp. The effect of anti-aircraft fire, however, was taken into consideration by the umpires when assessing the results of the raids.

The Exercises began as sensationally as could have been wished by the most rabid scaremongers. Nos. 39 and 207 Squadrons crossed the Essex coast between 6 and 6.30 on the first day. The City of London, County of London and County of Warwickshire Squadrons crossed the Kent coast between 6 and 6.30 on their way

to attack the Air Ministry, and Nos. 12, 11 and 100 Squadrons crossed the Sussex and Hampshire coast to attack the Crystal Palace at Sydenham, the Stores Depôt at Kidbrooke and the Beckton Petrol Depôt. There was a wind of about 50 m.p.h. from the south-west at 10,000 feet with broken clouds and thunder over Oxfordshire.

Many interesting events took place. A squadron attacking Chelsea by flights was intercepted and completely overwhelmed by fighters, while another Eastland squadron (Flying Fox day bombers) made a successful raid and lost only one machine through A.A. fire. This squadron took only twenty-eight minutes to come from Shoreham to their target in East Ham, an important indication of the swiftness with which an aerial attack may be launched and an illustration of the relative performance of day bombers and fighters, which will be referred to again later. This squadron was intercepted by fighters on the way back and lost two machines according to the umpires' ruling. Twenty-eight raids were made during the night, and the Westland commander sent up fighters from Nos. 3, 17, 32 and 23 Squadrons to intercept the raiders. The searchlights, where weather conditions permitted, picked up the raiders quickly and held them until fighters saw and attacked them. Twenty-two air combats took place.

It is not my intention to go through each day's fighting in detail, and the above serves as a fairly typical example. During the course of the Exercises, I was able, by permission of the Air Officer Commanding the Air Defences of Great Britain, to visit a number of operations rooms in various parts of the country, to see the observer posts and searchlights at their work and to visit the aerodromes of fighters and bombers both by night and day. I had, indeed, every facility provided me for making a study of the conditions and for discussing them with the officers taking part; and, while I do not presume to voice the official view, which must necessarily remain undisclosed, I am able to draw certain conclusions as to the information gleaned during the Exercises and to its probable effect upon future policy.

First of all the defence, as has been suggested already, did surprisingly well. It showed what few people seemed to grasp at the time and what, indeed, was vigorously denied in the majority of writings about the Exercises, the unexpected and extraordinarily important fact that, given good weather, aircraft are capable of being used very effectively for purely defensive work.

It must be constantly borne in mind that the defenders were hampered by the absence of A.A. bursts, the surest, quickest and most

definite method of pointing out to them the position of hostile aircraft. It must be remembered also, and this is a point I wish to underline, that some of our day bombing aircraft have advanced more rapidly in design than our fighters, and that the fighters were therefore at a disadvantage from the beginning. Yet, in spite of these disadvantages, the umpires decided that only nine raids out of fifty-seven during the whole course of the Exercises succeeded in evading the defence on both inward and outward journeys. The fighters were adjudged to have brought down 151 day bombers and to have lost 139 machines. No figures of the numbers of raids that attained their objectives without being attacked were given, although the final official *communiqué* stated of the fifty-seven raids that "these were attacked thirty-nine times on the way in and thirty-seven times on the way out." But inasmuch as many raids were attacked more than once these figures give no precise indication of the effectiveness of the attacks.

On the whole, therefore, the defenders did surprisingly well. They found and attacked a much higher percentage of raids than last year. The observer system worked well and the searchlight units were efficient, although it was impossible to help noticing that their equipment is inferior. The fighter patrols, helped by observer posts and searchlights, found their quarries quickly.

The system of assessing casualties inclined to favour the attackers. A single-seater fighter may dive straight on the back gun of a two-seater day bomber and bring down the day bomber. A point the theorist is always losing sight of is that the fighter pilot while he is diving is almost completely armoured by his engine. Only the top part of his head from the nose upwards can be reached by the observer's gun. The observer, on the other hand, stands entirely unprotected against the fighter's fire: a point which was brought home during the war by the large number of two-seater fighting machines that returned to their aerodromes after battle with their observers dead in the back seat. Consequently, even when the fighter chooses to attack openly and directly, diving on the rear gunner without attempting to employ cover of any kind, the advantage lies with the fighter. But the fighter is also in a position to employ surprise more easily than the bomber, which is larger in size and must fly on a set course. The advantage, therefore, when once combat is joined, lies always with the fighter. Brilliant two-seater pilots and gunners have before now held their own against patrols of three and more fighters single-handed and have brought many fighters down. But these are exceptional cases, when the

skill of both pilot and gunner of the two-seater is much above the average.

In the ordinary way, given pilots of equal skill and gunners of equal skill, the fighter has a fundamental advantage over any existing standard type of day or night bomber. This conclusion was amply borne out by Guynemer, McCudden and others between 1914 and 1918, and is argued at length in my book, "The Strategy and Tactics of Air-fighting." But if for some reason the bomber has almost as good or better performance than the fighter, if it can climb nearly as fast, if its maximum speed is nearly as high and if it can be manœuvred nearly as easily, the position arises when the bomber can be fought like a single-seater with the added advantage of some slight protection against attack from the rear afforded by the gunner.

When this position arises the tables may be turned and the bomber may gain an advantage over the fighter. But these conditions never ought to arise with an Air Staff conscious of the tactics of air fighting. And this leads us to the most serious revelation made by the Exercises. It was a revelation the importance of which cannot be over-emphasized, because it deals with a foundation element upon which must rest the whole fabric of effective air defence.

We have seen that the approach of bombers can be seen and reported in time for fighters to get off the ground and find and attack them. But do the fighters attack them soon enough? Do they, having attacked, invariably come off best in the battle?

Last year I pointed out in the *Army Quarterly* that the performance of our fighters required improving. Compared with our day bombers they were too slow. This year that difference was even more apparent. It is clear that although the rate of climb of many fighters is good, their speed is totally inadequate.

With the Air Ministry's permission I am able to give the following performance figures for the fighters and bombers in use in the R.A.F. at the present day. The figures are the result of the official performance tests at Martlesham Heath Aerodrome. The "service ceiling" is the height at which the machine's rate of climb falls below 100 feet per minute; all tests are done with full military load.

	Speed in m.p.h. at		Climb to		Service Ceiling.
	6,500 ft.	10,000 ft.	6,500 ft.	10,000 ft.	
Day Bombers	153.5 122.5 114	150 120 109	4 m. 6 s. 6 m. 30 s. —	6 m. 21 s. 11 m. 45 s. —	27,000 ft. 18,000 ft. 15,550 ft.
Fighters	134 146 154 150	133 145.5 153 146.5	5 m. 4 m. 3 s. 4 m. 6 s. 5 m.	8 m. 36 s. 6 m. 48 s. 6 m. 21 s. 7 m. 45 s.	20,500 ft. 28,000 ft. 27,000 ft. 21,500 ft.
Night Bomber	95	92.5	14 m. 6 s.	20 m. 12 s.	9,400 ft.

The Virginia carries a load of 2,240 lbs. in bombs. Its gross weight is 17,205 lbs.

It will be seen that the Fox bomber is much faster than many fighters. This is a peculiarly anomalous position. It means that in battle the Fox would not only stand a good chance of getting away unattacked, but that, if attacked, it could be fought as a single-seater with every chance of bringing down its opponents. Now the Fox is an outstanding type of machine developed, like most good war machines, as a direct result of the Schneider Trophy seaplane race. It is probably a better standard day bomber than any other in existence. No foreign machine would be so dangerous to us as the Fox would be to an enemy. But that does not obscure the fact that if we have the designing and constructional ability to produce the Fox with its high speed and rate of climb, we can also produce a single-seater fighter with even higher speed.

It is to that task above all that the Exercises should direct the energies of our manufacturers and of the department of the Air Ministry which calls for new machine specifications.

The speed of our day bombers, as has been suggested, is a matter for congratulation and not for alarm ; but also, in a sense, it constitutes an admission that our fighters ought to be better. But it would be a mistake to rush into any change of policy. There is no reason, for instance, to say that it is impossible to build a fighter with adequate performance with an air-cooled engine. Experiments now in progress which come under the Official Secrets Acts and so cannot be referred to in detail may produce an air-cooled engine capable of giving the speed of the water-cooled engine. At the present moment, however, no such engine exists outside the test house. We saw in the Schneider Trophy last year the extraordinarily interesting experiment made by the Bristol Co. in the " Crusader " monoplane. This machine certainly represented a year ago the fastest machine possible with a special air-cooled radial engine. Yet it was several miles an hour slower than machines with water-cooled engines produced at the same time. The inference is that the most brilliant design of air-cooled engine could not, at that date, give the speed of a water-cooled engine. It is the more difficult to understand why the air-cooled radial engine was still chosen exclusively for fighters whose whole effectiveness lies in performance. The result of that stereotyped policy was visible in the Exercises, where we had the ridiculous spectacle of day bombers outpacing fighters.

The question is not really between air-cooled and water-cooled engines for fighters ; it is between the faster and slower engines. At present water-cooled engines are faster. At present, therefore,

our fighters should be equipped with them if they can give an equally good rate of climb.

The arguments in favour of the air-cooled engine for fighters are well-known and do not affect the issue. It is said that an air-cooled engine can be shot about and yet continue running. Yet this is a point which has small importance for the fighter flying over or near friendly territory, and great importance for the bomber flying far over enemy territory and subject to constant attacks by anti-aircraft guns and fighters. It is also said that the rate of production of radial air-cooled engines can be quicker and the cost less than of water-cooled engines. Such academic points go by the board in real war. Then expense means nothing ; production rates are forced artificially until what the fighting man requires is somehow produced quickly. The first consideration in air war is to provide the fighting airmen with what they require. The single-seater pilot, if his machine lacks performance, will be not only completely ineffectual in attack against all opponents, but will be relatively easily shot down. In fact, his only remaining protection will be his power of manoeuvre.

The outstanding feature of the Exercises, then, was the striking and unmistakable emphasis laid upon the importance of performance in single-seater fighters. Our fighters ought to be at least 50 m.p.h. faster than our day bombers. In fact they are often 20 m.p.h. slower. This position cries out for corrective action.

There is one more point brought out by the Exercises which concerns the public of London, and, although it is not strictly an aeronautical matter, I feel justified in referring briefly to it in this article. It has to do with gas protection for the civil population.

The need of the recent Exercises, or even of the existence of an air defence scheme, may be a matter for debate ; but so long as there are such schemes, so long as such exercises are deemed of value they should be complete. The R.A.F. does not work without aerodromes or with any other part of its necessary equipment missing. Yet one of the most vital sides of air defence has hitherto been completely neglected in both this year's and last year's Exercises. The Home Office is deputed to deal with protecting the civil population against gas. Such protection would consist first and foremost in the dissemination of accurate knowledge about gas. Information on how it could be distinguished and the type told, the effect of weather conditions and so on would be distributed. Simple instructions for minimizing its effects and for protecting against it should also be issued. Chemists should know how best to improvise

gas masks. The Royal Air Force visualizes a time when its operations rooms will be underground, gas proof and stocked with provisions. The Home Office meanwhile does nothing about the protection of the civil population. If the Exercises are to be complete, the Home Office must bestir itself and publish its plans for dealing with gas attack.

Summing up, therefore, it may be said that the Exercises teach numerous technical and disciplinary lessons and that they shed useful light upon the working of the entire air defence system including the Observer Corps and searchlights. They indicate that air defence is by no means impossible. But above all things they emphasize the urgent need for fighting aeroplanes with a better performance. They show that the whole structure of air defence is built up with the fighting machines, but that these machines, if they are inferior in speed and climb, can form no effective barrier and may indeed, by giving a false sense of security, be instrumental in causing defeat. Faster fighters are required for the R.A.F. and, in general, the performance of our fighters demands much closer study than it has been given in the past.

IMPRESSIONS OF THE ARMoured FORCE TRAINING

By "OTAC."

"The coming of a time when the armed millions of the present will have played their part."

THE recent exercises of the armoured force in the Salisbury Plain area cause one to wonder if we are on the threshold of the era mentioned in the above quotation, or whether the many limitations of the armoured force will render it more or less ineffective. In these exercises the armoured force was generally employed on an independent rôle and opposed to other arms acting either by themselves or in cooperation. This was not meant to imply that its only use is on an independent rôle, but such a rôle gave full effect to its primary characteristic of mobility.

Although many limitations of the armoured force have been disclosed, it should be remembered that the exercises were designed with that object in view. Frequently the conditions were deliberately in favour of the opposing side, in order to search out the weak points in the organization and control of the armoured force. Therefore, if limitations are chiefly considered it is because by such methods something may be learnt ; the value of the armoured force needs no advertising.

An armoured force can cover long distances over good roads and tracks and across suitable country by day. At night across un-reconnoitred country its movement is slow and laborious, and at times does not exceed, in all, two miles an hour—that is to say, by night it cannot move much faster than infantry. A ground reconnaissance by day of the area over which it is proposed to move, might give away the value of surprise, especially in the face of an enemy with a wide protective screen. An alternative is extensive air reconnaissance and many photographs ; whether this would prove satisfactory is a matter of doubt, and such action might also give away the intention of the commander. It may be said definitely, that, except by moonlight, long cross-country movements under cover of darkness over unreconnoitred country is not a feasible

operation of war for an armoured force. It can be done, but the value of mobility is lost, speed is reduced to a minimum, and the noise would give away any chance of effecting surprise.

To enable it to act with success, an armoured force is more dependent on ground than any other arm of the Service. Cavalry or infantry, light artillery and even field artillery, can move across country which becomes impossible for an armoured force. Even the apparently ideal area of Salisbury Plain presents difficulties to an armoured force with its present type of equipment. A river obstacle which has to be bridged is a far greater problem to an armoured force than to the other arms. Bridges must be heavier and there must be several to enable a crossing to be made at numerous places. For an armoured force to cross a river at night in the face of even slight opposition seems a most precarious operation. Assault bridges must first be employed and bridgeheads established—for this, infantry is necessary. It is unlikely that the bridgeheads can be formed without giving away surprise. Finally, when the bridgeheads are secured, the heavy bridges must be constructed in the dark, if such a task is possible. Meantime, the defending force with its mobile reserve, which will probably include some guns, will have reached the threatened area and will delay the crossing. In addition, the air may be available for night bombing with the result that the crossing could only be made at considerable expense, or it might even be prevented altogether. It seems, then, that for an armoured force to bridge an obstacle it is essential to do so in daylight, and that surprise must be sacrificed. It might be said that the vehicles could be ferried over on rafts, but when it is considered that the armoured force as now organized contains hundreds of vehicles, the provision of rafts is a problem in itself.

Large wooded areas such as exist to the north-west of Salisbury Plain provide excellent cover for an armoured force, but are also a danger. Sunken roads, road blocks, mines and suitably placed obstacles in this type of country may hold up an armoured force for a considerable period. To avoid being delayed in enclosed country, it may be necessary to make a wide *détour* which means loss of time and loss of valuable mileage.

That an armoured force is vulnerable to air attack when halted is a commonplace, but only direct hits count against such a force, and, consequently, in this respect it has less to fear from the air than the other arms. As now organized the armoured force has no A.A. battery, and it is not proposed to cumber up the force with this extra organization.

At night administration and protection from ground forces are facilitated by concentration, and close grouping favours control by day ; but this means that an easier target is given to attack from the air. Safety from the air demands dispersion and a balance between the opposing claims must be struck. The question of locating the force in its lair will be considered later, but, if it is discovered in hiding by day, it can be bombed effectively, casualties inflicted and its moral adversely affected. Its mobility will enable it to bolt once the attack starts, for it is unlikely that it will " sit-out " a continuous bombing attack. If it bolts two things happen, first the value of surprise is lost and there is every probability of the force being under observation for the rest of the day. Secondly, it will scatter, and this will result in some disorganization and loss of control. Bombing attacks by night might not be so serious, as the force might slip away by tracks and routes which had been previously reconnoitred in daylight. The distance of an armoured force from the aerodromes from which the enemy's bombers work, and the number of bombers available must be taken into consideration. It seems, however, that once the bombers have marked down their prey, they will not be easily shaken off, and will continue to harass the armoured force. Their policy will no doubt be for flights to succeed each other at stated intervals, so that the attack can be maintained as long as possible.

A further difficulty with regard to an armoured force will be its protection when halted either for the night or for lengthy periods. It is essential to have all round protection, which means infantry with machine guns and the employment of a large number of men. If the force halts in a concentrated formation, the problem is simplified, but such a formation is vulnerable. It would appear that ground protection will be required against armoured cars and cavalry patrols. Against an attack by an armoured car a tank across the road with its guns trained on the approaches provides a simple remedy. Against cavalry reconnoitring patrols the problem is more difficult as such patrols will endeavour not to disclose their presence. If the patrols are fired on, they have definite information that some force of the enemy has been located and their task is half-completed.

The first requirement of a commander opposed by an armoured force is information. The means of locating, following and reporting its movements are of primary importance. The chief ways for obtaining such information are from observation from the air, and reconnaissance by cavalry and armoured cars.

Detection from the air if the armoured force is lying up by day

may be almost impossible. Skilful concealment in wooded areas during summer months renders the task of air observers very difficult. Strangely enough the task may be simpler by night if the force is moving by road. Long lengths of road can be patrolled, flares dropped, and with some cooperation from the ground there is a reasonable chance of the force being discovered. The best results should be obtained with air and ground troops working in conjunction. The question of weather and visibility must be remembered, which means that a commander who depended solely on the air for his information might remain in ignorance of the enemy's movements.

If observation from the air is impossible for any reason, reconnaissance by armoured cars and cavalry seems the only solution. Armoured cars by themselves are most valuable, but, as they are largely tied to roads and may be trapped by road blocks, they cannot be entirely depended upon for information.

The ability of cavalry to locate an armoured force was clearly demonstrated in this year's training, although it should be borne in mind that the cramped training area made distances less than would be the case in real war, and favoured cavalry action. The methods employed to locate the armoured force were somewhat as follows. The cavalry formation, usually a cavalry brigade, was employed on the flank and was given the task of locating the armoured force, and, in certain cases, of delaying its advance. For this task it established a line of observation and a line of resistance, each of which was generally parallel to the main line of advance. The line of observation was formed by advanced squadrons acting some 9,000 to 10,000 yards in front of the line of resistance. The squadrons employed on this work were instructed to ignore the light or reconnaissance group, and to locate the heavy group of the armoured force and to forward reports as to its strength and movements. For this purpose concealed posts were established on the line of observation, in front of which line patrols were pushed out some three to five miles with instructions to search given areas. Allowing for the distance of the line of resistance from the flank of the main army, the result was a careful combing of the country some twenty miles to the flank, which enabled about two hours' warning to be given of the approach of the armoured force.

This plan of operations led to the unusual situation of a cavalry line of observation coming between the light and heavy groups of the armoured force at night. It is a matter of doubt if such a situation could arise in war, particularly since the armoured force to-day

is short of reconnaissance vehicles. If the reconnaissance group was up to strength, it is probable that the cavalry would be discovered.

With this system of searching the country the best results seem to be obtained with small patrols, and by the employment of as few troops as possible on the line of observation. However, the crux of the matter lies in the sending back of the information gained; the means of communication being W/T, R/T, visual signalling and patrols. The use of wireless is the quickest method, but the enemy can detect its use and so know that his movements are under observation. In time this disability may be overcome, but, as things are, the squadron headquarters can be tracked down—if the commander of the armoured force considers it advisable—and captured or forced to move away, and the whole system of communication can be broken up.

Visual signalling is a valuable supplementary means of sending back information, but it is dependent on ground, and thus the only sure method is the mounted despatch rider working individually or as part of a relay or courier system. Finally, armoured cars, if available, could be used to assist in the transmission of information. At first sight this may appear wasteful, but a section of cars to a cavalry brigade line of observation would go far to ensure a continuous supply of intelligence. With the increased establishment of armoured cars such a use might be feasible.

The question of the casual cavalry dispatch rider and the line of observation troops being entangled between the enemy's light and heavy troops, deserves a word. The moral effect of being opposed to armour limits the activities of the unprotected. It is easy in time of peace to draw false lessons, and the all-important question of the moral of a few individuals opposed to a mobile armoured light group must be borne in mind. Also the withdrawal of the line of observation troops is not an easy matter, but might be carried out by wide flanking movements under cover of darkness. It is hardly necessary to add that the training, moral and leadership of troops called upon to carry out this rôle will have to be, as it is now, of the highest order.

In addition to locating the armoured force the cavalry was at times required to delay its approach. For this purpose a line of resistance was established where possible along some definite obstacle. The exercises seemed to prove that a cavalry formation holding a definite tank obstacle and backed by highly efficient day and night bombing squadrons, could hold off the armoured force for an appreciable time. In day time when the position of the armoured

force had been located by ground patrols, the day bombers were called up. By night a code of flares and rockets from the ground indicated to the night bombers the area in which the armoured force was moving.

Cavalry as now organized is very mobile, and during a week of the recent training covered an average of over thirty miles a day, while for patrols the average was much higher. If cavalry can cover these distances, it is not an unsuitable force for action on the modern battlefield. It was made apparent, indeed, from these exercises that cavalry is more fitted than the slower moving arms for the highly mobile warfare for which it is stated we are training.

It is suggested that the future rôle of cavalry will be almost entirely reconnaissance, as far and as wide as horses and organization permit, and occasionally the task of holding an important feature or obstacle. If infantry cannot advance against machine guns neither can cavalry, and the rôle of cavalry in the attack is necessarily limited by the smallness of its resources in guns and assault weapons. Its machine guns, however, give it considerable holding power in the defence, and it might at times be employed so that this characteristic is given full scope.

In mobile operations there will be flanks, and it is on these flanks that cavalry will probably be used ; the following extract from the final Dispatch of Sir Douglas Haig bears out this view :

“ It has been proved that Cavalry . . . have still an indispensable part to play in modern war. Moreover, it cannot safely be assumed that in all future wars the flanks of the opposing forces will rest on neutral States or impassable obstacles. Whenever such a position does not obtain, opportunities for the use of Cavalry must arise frequently.”

In opposition to the views sometimes expounded in the Press and from other places, it is submitted that cavalry still has an important part to play in modern war. Mobility is the keynote of the battlefield of the future. If this is admitted, then the mobility of cavalry alone, if nothing else, is bound to assure for this arm a place in the highly mobile warfare of the future.

The use of armoured forces is likely to restore mobility to its preeminent place in warfare. A mobile force of this nature can cover in one day the same distance as the slower moving arms can cover in about three days. Such rapidity of movement upsets all our standardized ideas of tactics and even strategy. To apply and to handle this instrument scientifically, we require experience concerning the most suitable composition of the force, and the possi-

bilities of its cooperation with the other arms. This experience is being gained each year.

Since one of the chief characteristics of an armoured force is mobility, it is only the highly mobile arms which can cooperate effectively with it. Cooperation with the air in attack and in reconnaissance has reached a high standard, and it seems, if full benefit is to be obtained from an armoured force, that it must have air co-operation. Of the other arms cavalry is the most mobile, and experiments in cooperation with the armoured force might prove of value. It could be ascertained if cavalry can assist in reconnaissance, or in flank protection, or whether it could hold defiles or river-crossings by which it is subsequently intended to withdraw. The difficulty appears to be that the staying power of an armoured force over long distances is necessarily greater than that of cavalry, but speed of movement, by day or by night, over unreconnoitred country seems to be in favour of the cavalry.

The control of an armoured force requires special measures. During the approach march, incidentally one of its most difficult tasks, an armoured force commander may be called upon to make and to re-make several plans. Fresh information from the air and the light group may disclose a change in the enemy's dispositions and necessitate a new plan. The line of advance may have to be changed owing to demolitions, destruction of bridges, unforeseen obstacles and so forth. The essential features in this stage are flexibility and the means of using ground and approaches to the best advantage. Fixed unalterable plans are not suitable, and the commander, while maintaining his object in view, must have imagination, quickness in decision and the means of communicating that decision rapidly. During this phase information of the country over which it is proposed to advance is nothing less than vital to an armoured force commander. This may be obtained from the air, from the light group, or from cavalry, and, if it is not forthcoming, the result may be failure and a complete waste of effort.

Having gained contact with the enemy, it would seem that battle reconnaissance, fire problems, fire plans and the employment of the force on the battlefield while presenting many problems do not create the same difficulty as controlling the force during the approach march. The problem with an armoured force is not so much how to employ it to the best advantage on the battlefield, but rather how to get it to the scene of battle intact, in hand and ready to make full use of all its powers. This control during the advance demands a high standard of leadership and restores to the art of generalship

some of the prestige which it has lost of late years owing to the immense size of armies.

In recent years it has been stated *ad nauseum* that fire and fire-power were the predominating factors in the Great War. If the training of the armoured force is any forecast of the trend of future land warfare, it is suggested that the outstanding feature will be mobility. Mobility in a well-organized, well-balanced, well-supplied force is indestructible. Its importance outweighs the value of armour which is destructible and which has many limitations. Fire-power to-day may appear, and is, more efficient behind armour, but there is a limit to the use of armour which in due course will be discovered. With careful organization and supply there is no limit to mobility save the power of the petrol engine. In short, it is submitted that greater chances of victory will lie with the side which develops mobility to its maximum extent.

Therefore, the more time devoted to increasing the mobility of our forces in general and of the armoured force in particular, and of learning the problems connected with the command of such forces, the better. It appears that the continuation of present tendencies may not unlikely lead to highly trained, highly efficient and highly mobile armies and the coming of a time when the armed millions of the present will have played their part may not be far distant.

THE IRISH FREE STATE ARMY

BY LIEUT.-COLONEL E. G. HART, late R.A. and I.A.S.C.

PART II *

The Army Air Corps.—The whole of this arm is at Baldonnell Aerodrome, some ten miles out of Dublin on the Curragh road. The aerodrome was constructed by the British Government in 1917 and consists of four very spacious hangars. Besides this aerodrome there are two others in the Free State, one at Fermoy in County Cork, and the other at Oranmore in Galway, but there are no detachments of the air corps now maintained outside Baldonnell. In view of the very flat nature of the country and of the amount of pasture land which makes good landing grounds almost everywhere, there is no need to construct airdromes.

The air corps consists of headquarters and one squadron: the latter is organized into two training and one service flights. The latest and pet machine of the corps is a three-seater general purposes "Fairy" 3F, similar to that of our own R.A.F., which it is hoped to standardize. For training purposes "Avros" and "Moths" are used in the elementary stages, "Bristol Fours" being the next stage. For the service flights "H.H.9s" and single-seater fighter "Martinsydes" are used. Officers have to be acquainted with every make of machine and to be prepared to act in any capacity—pilot, observer, stores or workshop officer—an eminently sound idea in view of the limited size of the arm.

The machines bear the Free State colours on the wings and tail, emerald, white and orange. They and the workshops were as spick and span as one could hope to see them in spite of what seemed an all too small establishment for such a large place.

There are now in June, 1928, 15 probationers—7 officers and 8 cadets—undergoing a two years' course of instruction. The syllabus, based very largely on that of the Royal Air Force, seems an exceedingly exhaustive one.

The air corps, although it consisted then of little more than its

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first chief, General MacSweeney, rendered considerable assistance to the Free State forces in the early days of its life while struggling with the republicans, both in scouting and in the distribution of propaganda. Of recent years its development has suffered, perhaps from a divergence of opinions as to whether it or civil aviation should be the recipient of the money available. This battle has not yet been fought out. If regular Atlantic air services utilize Ireland as their jumping-off ground, it is possible that civil aviation may progress rapidly. Colonel Fitzmaurice, the present O.C. of the air corps, by being the first to fly the Atlantic from east to west, has given the country a tremendous pride in its Army Air Corps, and may be the means of interesting commercial air concerns in utilizing Ireland as a field for their development.

The mess of the air corps was a very pleasant one. The cadets live in the officers' mess. Four of the present officers saw service in our own Royal Air Force during, or shortly after, the war, and thus have the very valuable experience gained in a large air force in time of war.

The Army Medical Service.—This is now organized as a division of two companies, one of which is based on St. Bricin's Hospital, Dublin, and the other is at the Curragh, where, like other corps there, it also acts as a training unit and a dépôt. Each battalion has a medical officer attached to it. The field organization under consideration contemplates a field division organized into companies which shall be approximately the equivalent of British field ambulances.

The Service is commanded by a colonel and 53 officers, 33 nurses, and other ranks have been budgetted for 1928–1929.

The Military Police Corps.—This corps has its headquarters in Dublin, and a dépôt company is also there. In addition there are companies at Dublin, Cork, Athlone and the Curragh. The first of these has two platoons and the others one platoon each. There are three detention barracks, one at Arbour Hill, Dublin, and the others at the Curragh and Athlone.

Army Signal Corps.—This corps is at present organized in a headquarter company at Dublin; and three signal companies for (i) Dublin, north and south districts; (ii) Limerick and Cork districts; and (iii) Athlone district. There is a School of Signals at the Curragh, which is also the signal company of the district, and a dépôt. Signallers are given a three months' general training course at this School, and some technical training before they are allotted to their units. Men, too, who are about to be transferred

to the reserve go there for three weeks before their transfer takes place in order to complete their records and to take over and store their uniform and equipment. The strength of this establishment is about 45 all ranks. The strength of the other district companies is 1 officer and some 30 other ranks, while the headquarter company is of the full strength originally laid down in the printed establishments, viz. 1 officer and 63 other ranks.

Infantry battalions have 1 non-commissioned officer and 15 signallers in their communication sections, and they have to report monthly to Army signal corps as to the practices carried out by their signallers, who are also inspected annually by the O.C., the Corps.

The School trains 1 to 2 instructors per battalion, giving them an initial course of three months and subsequent refresher courses as found necessary. There are no battalion signal officers at present, although a number of officers have been trained. An instructor permanently resident at Baldonnell is responsible for the signalling training of the Army air corps.

There is no field signal unit as yet, but a scheme for one is being made out.

Men for the signal corps are enlisted for five or seven years. They receive trade rates of pay, 2s. per diem as a Class II, and 3s. a day as a Class I wireless operator, in addition to the regular infantry rates of pay.

The wireless equipment is the British 120 watt and 30 watt sets, but these have been considerably modified and strengthened, so that those figures no longer represent their real powers.

Army Transport Corps.—In an army evolved from a guerilla force and engaged during the first years of its regular life in rather strenuous warfare, it is inevitable that the auxiliary services should be the last to be properly organized. Thus in the Free State Army, when this article was written in June of this year, the title transport corps covered not only the transport service, but also the supply, ordnance, remounts and barrack services. A scheme is now under consideration, and will probably have taken effect before this article is published, to alter the name of the corps to supply and transport, or something similar, to denote its supply function. The scheme also provides for considerable changes in organization.

In the past there were command companies, district companies and brigade companies. With the abolition of commands in 1927 the first ceased to exist, while the third were gradually absorbed into the district companies as the reduction in numbers of the Army took place.

It should be noted that districts and brigades (although these latter are at present absorbed in districts) has each its quartermaster, corresponding to the Assistant Director of Supplies and Transport or the Senior R.A.S.C. officer in the British Army. This officer is nominally his G.O.C.'s staff officer for S. and T. duties, but actually does a good deal of executive work, and receives orders direct from his corps head on technical matters as a matter of convenience.

The general idea of the new organization is :

(i) A main supply depôt at Dublin for the whole country directly under Army Headquarters and comprising : corps records, supply branch, ordnance branch, contracts and disposals, corps workshops, repair workshops and experimental and research section.

(ii) A supply battalion, consisting of 3 mechanical transport companies, 1 horse transport company and 1 supply company.

These companies will be divided into sections and distributed as found necessary among the administrative districts.

(iii) The training establishment at the Curragh. This at present also includes a garrison section which carries out the necessary supply and transport duties for the Curragh. This establishment also carries out the duties of a depôt in the same way as the School of Signals does for the Army signal corps. It should be noted that cookery and the supervision and instruction of army cooks also falls among the duties of this training establishment.

The horse transport company is at McKee Barracks, the old Marlborough barracks north of Phoenix Park. It at present numbers some 80 officers and 800 other ranks, exclusive of 3 officers and 50 men of the barracks service. There are 167 draught and 160 riding horses, which include officers' chargers and some 50 remounts. There are 160 mechanical vehicles, including 14 three-ton lorries, 69 two- and one-ton lorries and staff cars.

Men are enlisted in the ordinary way and not for special periods, but non-commissioned officers have to sign on for a total of five or seven years' colour service. There is no corps pay, but artificers and specialists draw extra pay.

The D.Q.M.G. is the head of the corps, and must certainly have his hands full with such diverse matters as he is responsible for.

Officers.—The officer problem is almost the weightiest that the Army authorities have to consider. The great majority—probably over 95 per cent.—of officers in the senior ranks are young men between the ages of twenty-five and forty. How to ensure a regular flow of promotion which shall offer prospects to the junior ranks

without doing injustice to those now at the top of the tree, and with many years yet of efficient service to give, seems to be an insoluble puzzle. Inducements are being held out to get officers to take gratuities and to resign their commissions, but this is only a partial solution. The great reduction in the Army since 1922-1923 has also, of course, aggravated the problem.

Up to now the question of replacement has not really arisen, but last year a few direct commissions were given to specially selected individuals, and 13 cadets were also selected to undergo a two years' course of training at the Curragh, after which they are to be granted commissions. I saw these boys training there and they seemed to be very much the counterparts of our British cadets, though the German type of "tin hat" which the Free State has adopted and which they were wearing for field engineering training gave them a curious appearance. They occupy some old married quarters at the Curragh. They are dressed as privates for work, but wear officers' pattern tunics (without, of course, any badges of rank or of corps) when walking out. Generally they appear to have the same status, privileges and obligations as our own cadets. They are paid as privates—2s. a day, and receive rations.

Officers' pay is as follows: lieutenant-general, £1,000 a year; major-general, £800 a year; colonel, 28s., 30s. and 32s. a day*; major, 24s., 26s. and 28s. a day; commandant, 20s., 22s. and 24s. a day; captain, 14s., 16s. and 18s. a day; lieutenant, 10s., 12s. and 14s. a day; second lieutenant, 8s., 9s. and 10s. a day.

In addition to the above there is an initial outfit allowance of £50 and an annual upkeep allowance of £20. Married officers get a larger lodging, fuel and light allowance by 1s. 6d. a day—5s. against 3s. 6d.—than unmarried officers, and an allowance of 3s. 6d. a week for each child over three in number. The lodging allowance, of course, is only given when quarters are not provided. Rations and a mess allowance are given as in our Army.

Officers' messes are maintained very much after the model of our own Army, and a defence force regulation officially recognizes that the object of a mess is to provide for the "cultural and social well-being of the members, the messing of members and visitors, the cultivation of *esprit de corps*, and the maintenance of the national and social position of the officers of the forces." Commanding officers are directed to dine in mess once a week and to see that all non-dining members attend that evening.

* The second and third figures are the rates after two and five years' service in the rank respectively.

To an old officer of the British Army the one sad note of these messes is that the toast of the evening is not to the King but to Ireland. The detail is laid down in the same regulation, everything being said in Irish. The C.O. first rises and says (the equivalent of), "Mr. President—Ireland." The President then rises and says, "Soldiers—Ireland—our Land." The rest of the members then rise and say, "Ireland—may God bless her."

Officers are mounted by Government, but the same limitations on the use of Army animals as exist in the British Army obtain in Ireland.

Non-commissioned Officers.—There is no division of under officers, as in our Army, into the two grades of warrant and non-commissioned rank, nor is the lance stripe given. The two highest ranks are those of battalion (or in the case of the other corps, "corps") sergeant-major and battalion quartermaster-sergeant, and bear three short horizontal bars, three inches long by half an inch wide, surmounted by a device, all in red embroidery, and braid on the right arm. They do not wear the sword or have any other distinction from the lower ranks.

The next grade is that of company or battery sergeant-major and quartermaster-sergeant. These wear the same device (F.F.=*Fhianna Fail*=volunteers of the country) and two bars. Sergeants come next and wear two bars without the device, and corporals, the lowest rank, wear one. While there are no recognized lance ranks, it is often customary to recognize in each corporal's squad his understudy when he is absent and who is looked on as next for promotion.

Recruits.—Recruits are obtained by advertizing in the papers and by poster notices. Recruiting parties and recruiting sergeants have been used, but, in view of the reductions, there has been no difficulty in making good the wastage. Recruits present themselves at the district headquarters where they are approved and medically passed and then proceed to the Curragh for a three months' course of training, which is identical for every corps of the Army. At the end of the course they are drafted to the various corps according to their needs. Theoretically a man enlists for any service in the Army: in practice it is often recognized that he shall enter the corps he prefers, and he is accordingly so posted.

The present terms of service are three years with the colours—this term is not, as a matter of fact, used, since as yet no colours have been issued: "army" service is the actual term used—and nine in the reserve. These terms are modified in the case of non-

commissioned officers and technical corps to longer agreements for four and five years' service instead of three.

The physical standards for recruits are as follows :—

	Grade A.	B.	C/B.
Age	18-24	18-28	18-34
Height (minimum)	5 ft. 9 in.	5 ft. 2 in.	5 ft. 2 in.
Weight (minimum)	11 stone	7 stone	—

Reserve and Militia.—During the second reading of the Defence Forces (Temporary Provisions) Bill in November, 1927, the Minister for Defence made an important pronouncement as regards the Free State Army policy. He stated that the Army, which up till then had been entirely a standing army, would eventually have also a reserve and a militia. The reserve was to be formed at once and the militia later, but actually the first militiamen came up for training in May, 1928, doing a three months' course, and in future years will come up a month every year. Detailed regulations for the organization of the reserve were issued in May, 1927, and further supplementary orders in January and February of this year. Briefly, the reserve is to consist of 15 infantry battalions, 4 armoured car companies, 2 batteries of artillery, 6 companies of engineers, 8 army air squadrons, 4 medical companies, 5 army signal companies, and 10 army transport companies. These units are to carry the same numbers as the standing units—a mistake, I think, if we turn to history. The word "reserve" in the title of a unit is easily dropped or missed out, with much resultant confusion.

Another criticism anent the reserve is whether the turnover from 14 battalions will be sufficient both to bring them up to war strength (222 men per battalion are required, plus a certain number extra for those unfit, etc.) and to provide sufficient men for the 15 reserve battalions, even though the strength has been fixed at the lower total of 484. Theoretically, of course—assuming that 350 men per battalion are passed to the reserve every three years—each battalion should, at the end of twelve years, have a reserve of 1,400 men, but I fancy in practice that the reserve of volunteer armies like our own and that of the Free State never approach the theoretical figure. In Southern Ireland, especially, where there is a very high rate of emigration, it is strongly to be doubted whether the reserve will come up to expectations as to strength.

The sum of £32,000 has been voted for 1928-1929 for the army reserve, an increase of nearly £12,000 on the estimate for the former year.

Pay, Allowances and Pension.—The pay of the Free State Army

has been calculated at approximately the same rates as that of the British Army, or slightly better. The private at present receives 13s. 6d. a week clear of deductions. That is to say, 2s. a day less 6d. for hair cutting and laundry. He receives the whole of his messing and clothing free of deductions. In view of the very low wages still paid in many parts of rural Ireland, this is good pay, and a fine stamp of man has thus been attracted to the Army. The pay mentioned is that of a private Class IV ; Class III, II and I receive respectively 2s. 6d., 2s. 9d. and 3s. a day.

Corporals receive 4s. a day, sergeants 5s., company quartermaster-sergeants 4s. 6d., company sergeants 6s., battalion quartermaster-sergeants 6s. 6d. and sergeant-majors 7s. 6d. Corps pay has already been touched on under the various technical services. In general terms this provides for two groups, A and B, the former being the more skilled and the latter the apprentice or assistant group. Each of these is again divided into two groups, I and II, according to skill. The rates of pay in group A are 3s. and 2s., and in B 1s. 6d. and 9d. That of officers has been dealt with under that heading.

Marriage allowance is given to all of and above the rank of company sergeants and quartermaster-sergeants, and to non-commissioned officers and men of the School of Music at 100 per cent. of their strength, to all ranks of the military police corps and to sergeants at 50 per cent. of their strength, to corporals at 25 per cent. and privates at 10 per cent. of their strength. The rate is 1s. 6d. per day, or 9d. when married quarters are provided, and an additional allowance of 1s. per day for each of the first two children, 6d. a day for each of the next two children, the maximum allowance in this respect being 3s. a day.

So far the question of pensions for ordinary long service has not of course arisen, since the ordinary term of service is only for twelve years. It is, however, anticipated that a small proportion of men will continue to serve up to and over twenty years, and probably more detailed regulations on the subject will eventually be forthcoming. A large amount comparatively is given for pensions for officers and men who served during the troubles from 1916 to 1924, viz. £296,000 for 1928-1929, an increase of £40,000 on the previous year. The amount of these pensions is calculated on what seems a very detailed scale ; for instance, the first period from the 1st of April, 1916, to the 31st of March, 1917, counts as five years' military service, whilst each of the next two years only counts as half a year each, 1919-1920 is considered a normal year, whilst 1920-1921, 1921-1922 and 1922-1923 are each con-

sidered as two years. From the 1st of April, 1923, to the end of September in that year is considered as one year. This pension is given at the rate of £5 per annum for each year as calculated above, to non-commissioned officers and men, at £10 per annum to each officer up to and including the rank of captain, £15 to commandants and majors and £20 to major-generals and colonels.

Uniform and Clothing.—One of the most striking things in the uniform of the Free State Army is its extreme uniformity. Where in other armies one sees an enormous variety of badges, colours and types of uniform, in Ireland one has practically only one uniform. Six patterns of cloth cover the whole gamut of army dress; of these, three are for officers, one for the tunic, a second for the breeches of dismounted officers and for slacks, and the third, a light buff khaki cord, for the breeches of mounted officers. The colour of the two former is a dull green, slightly tinged with brown, but a very distinct green as compared with the British khaki. The three cloths for the men are of a uniform shade, very much darker and greener than that of the officers, and are for tunics, dismounted men's breeches, and slacks generally, and mounted men's breeches respectively. Both for officers and men there are only three patterns of garments if we exclude canvas working clothes, that is to say, the tunic, breeches and slacks. Officers' tunics vary slightly from those of the non-commissioned ranks, but are closed to the throat and a white collar is worn inside, as was done by some British corps before we took to an open neck. Brown canvas dungaree suits are issued for fatigues, etc.

The general head-dress is a field service cap of the British pattern. For generals and colonels this has a patent-leather brim with a narrow rim of gold embroidery. Military police also have the patent-leather brim, but without embroidery. The field service head-dress is a steel helmet very like the German pattern. This design was adopted after a number of experiments to determine which gave the greatest protection.

Brown leather leggings of the spring pattern for men and a lace-up pattern for officers, and brown boots are worn by all men and dismounted officers, while mounted officers wear field boots. These brown leather leggings are quite a feature of the Free State Army and are certainly very smart. The overcoat is of the same colour as the officers' and men's uniform respectively, but of thicker material.

The badges of the Army, worn on the collar to distinguish services and arms, and on the shoulder to distinguish officers' ranks, are so few that they can be put on a card no larger than a quarto

sheet, 10 in. by 8 in. Badges of rank for officers are a bar and a diamond. Captains, lieutenants and second lieutenants are distinguished by three, two and one bar respectively. Commandants wear a diamond above one bar, a major two diamonds and a bar, and colonels three diamonds. All these are in bronze. Generally officers have the same insignia, but in gold thread on a scarlet background and scarlet tabs on each side of the collar; generals having three diamonds, lieut.-generals two diamonds and a bar, and major-generals one diamond and a bar. Rank badges are mounted on coloured cloth, a narrow border of which shows around the diamond or bar, red for those of Army headquarters, blue for district staffs, green for brigade staffs, purple for the infantry, and yellow for all other arms and services. The badges distinguishing services are of silver for officers and of gilt brass for men.

Equipment.—The whole Army, except the commissioned ranks, carries the same equipment—A '303 Mark VII short Lee Enfield rifle with a 17 in. bayonet, similar to that of the British Army. The British webbing equipment, but dyed a greenish-black to harmonize with the uniform, a Wallace entrenching tool, and a knapsack which in time of peace is fitted with cardboard inside to make it set square completes the equipment. One hundred rounds of ammunition are carried by the infantry and in the other services. The total weight of equipment in field service kit, including ammunition, is just over 100 pounds.

Rations.—The Free State Army scale of rations is a very generous one and said to be rather better than that of the British Army. It consists of 1 lb. bread, $\frac{3}{4}$ lb. meat with bone, 3 oz. sugar, 2 oz. butter, $\frac{1}{2}$ oz. tea, 14 oz. potatoes, $\frac{1}{2}$ pint milk, 7 oz. cabbage, 3 oz. bacon, $\frac{1}{2}$ oz. jam, 1 oz. rice and condiments. There are numerous alternatives for the meat, cabbage, bacon, jam and rice. In view of the fact that the scale of living in Ireland is undoubtedly lower than that in England, the men should certainly have nothing to complain of in the matter of rations.

Discipline.—The rules of procedure and discipline generally are based on that of the British Army and are administered under the Adjutant-General through a Judge Advocate-General. The one point in which there appears to be somewhat of a deviation is that fines are more frequently resorted to as a means of punishment than in the British Army, but a man always has the right to appeal against such an award and to request a court martial. So far as I could ascertain, the general state of discipline seems to be very good and not behind that of the British Army.

Training. General.—There is a special training establishment at the Curragh called the Army School of Instruction which at present is naturally playing a very large part in the Army. As already mentioned, the defence plans division of the general staff in Dublin is also giving the matter of instruction and training its closest attention, for with a new army whose traditions and customs it has to form, it is most important that no false steps should now be taken. Practically the whole training of the Army is carried out at the Curragh under the immediate supervision of the Army School of Instruction, including that of both cadets and recruits.

Units.—Every battalion goes into camp for a month during the year, and in that time carries out a regular programme of field training. So far as circumstances permit, this camp is held at the Curragh. Batteries, similarly, carry out artillery practice at Glen Imaal, County Wicklow. Musketry training entails the firing of 285 rounds per man in the infantry and 150 in the other services.

Officers.—All officers are now being made to go through a six weeks' course at the Curragh in order to ensure uniformity of methods in the Army, and to correct, in many cases, an absolute lack of any previous training owing to the troubled times of the Army's birth. The fifteenth of such courses was in progress in May, 1928, and from what I could see of it, and judging by details here and there, seemed an extraordinarily sound one within the necessarily limited resources at the command of the training staff there. Some 60 officers form each course.

There is also a machine-gun course of six weeks in which riding and horse mastership are also taught, and through which as many as possible of the junior officers are being put. The matter of signalling training has been already touched on.

Cadets.—A start has been made with 13 cadets entered in 1927 for a two years' course at the Curragh, which will be divided into five periods, and it is hoped to obtain another 40 this year. With such a very small class and with, as yet, no special establishment, it was hard fully to see what their training was, but, judging from the work of the Army School of Instruction generally, it is probable that they are being soundly trained.

Non-Commissioned Officers.—Non-commissioned officers have to pass through courses at the Curragh in the same way as officers. The eleventh of such courses for 100 non-commissioned officers was held in May, 1928, and followed much the same lines of those for the officers. An interesting feature of these courses was that religious instruction was given.

Orders, Books and Publications.—Two types of orders are issued, viz. defence forces regulations which are signed by or for the Minister for Defence, and general routine orders issuing from the Adjutant-General's office. The former are the more interesting, as they have included the various points of organization, etc. The following manuals have already appeared in print: Infantry Drill, Ceremonials, Lewis Gun Training, Grenade and Bayonet Fighting, Trumpet and Bugle Calls, Musketry Regulations, Tactical Drill, Army Medical Service, Annual Training, and others are in course of preparation.

An *T-Oglach*, a publication of which three numbers have now appeared in a quarterly form, is the successor to the weekly two-penny army newspaper. It is unofficial, but contains interesting articles both regarding the new Free State Army, the importance of Irish military interest and general military articles. It compares quite favourably with other military journals.

Conclusion.—This sketch of the Free State Army is necessarily incomplete, both from my own small experience and knowledge of it and from the fact that it is itself in an extremely fluid and changeable condition. The article has been written because there seemed to be a considerable desire for information on the subject which was nowhere available in any publications generally accessible to the average military officer. I have throughout been accorded the utmost help in getting the information I required, and there seems to be no ill-feeling of any sort whatever existent, so far as I could see. To what extent we could count on the Free State Army joining us in another Great War is a matter of the utmost speculation; it would probably depend to a large extent on how far Irish interests were involved, at any rate at first. Later on, it is quite probable that the long association between the two countries would take effect, but this is not a matter which can be counted on. In any case, I think one may count with the utmost certainty that we should never have the slightest fear of them joining our enemies, a prediction which one sometimes hears from pessimistic quarters, and as years go on it is more than probable we shall find the Irish Free State Army cooperating as cordially with us as do now those of the great Dominions.

SOME OF WELLINGTON'S STRATEGICAL PROBLEMS, 1812

BY MAJOR-GENERAL SIR W. D. BIRD, K.B.E., C.B., C.M.G., D.S.O.

(*With Map*)

I

GENERALIZATIONS can usually be questioned, yet it is not inaccurate to say that the year 1812 was *the* year of crisis in the Great War of the last century ; and, further, that crisis, presentment of great events, must have been in the air even at the end of 1811, for Wellington then expressed to a correspondent the hope that the blow against Napoleon would not be struck too soon. And he added, with reference to the suggestion that his troops might with advantage be sent in certain circumstances to another theatre of war, "supposing that there should be a general breeze in Europe," that, in his opinion, Napoleon would "not even reduce it (the French Army in Spain) considerably, but he will not reinforce it. If I am right," he went on, "the British Army cannot so advantageously be employed as in the Peninsula . . . (or in an attack on) the most vulnerable frontier of France, that of the Pyrenees."

Holding these opinions it was clearly necessary that Wellington should take steps to be ready to play his part in a general breeze, and, in order to gain both security and freedom to manœuvre for this purpose, the first and most obvious measures were the reconquest from the French of the great frontier fortresses of Ciudad Rodrigo and Badajoz ; for one stood on the best routes leading from Lisbon, Wellington's base, north-eastward towards France, the other on the easiest line from Lisbon to the fertile province of Andalusia, which was being held down by a large portion of the French forces known as the Army of the South. And once the fortresses had been captured and well garrisoned Wellington, whose troops also held the Portuguese fortresses Almeida and Elvas, could, with less anxiety for the safety of Lisbon, either concentrate force against the

French group operating in Andalusia, or he could mass divisions against the equally important one, the Army of Portugal, which was holding the area between the Tagus and Valladolid.

Time, as every one knows, is important in the ordinary business of life, but in war time becomes, as Wellington exclaimed, everything, for the mere fact that time has been gained implies that the enemy has been placed at a disadvantage, and, to do that, is a big step towards victory. Wellington, therefore, was only acting as an able leader should act when he took steps to gain time by making, in the autumn of 1811, quiet preparations for an attack on Ciudad Rodrigo, near which his main Army was standing, whenever the dispositions of the French troops were such that large numbers could not quickly be brought together for the relief of the fortress. And these steps were taken at a season of the year—late autumn and early winter—when even if the French collected large forces to counter his operations, want of food—since they depended for subsistence on supplies on the ground, which would not be available in large quantity until the next harvest was ripe—would soon have obliged them again to disperse. The opportunity came early in 1812, and the place, the first in the Peninsula that was taken by the British troops by assault, fell after a siege of only twelve days on the 19th of January.

Wellington immediately took similar measures for the capture of Badajoz, and, keeping his own headquarters near Ciudad Rodrigo until the beginning of March in order to mislead the enemy, he sent first the siege train and then the whole of the Anglo-Portuguese Army southward; and, in doing so, great daring was shown, for there remained in all the northern theatre of war from Corunna to Castello Branco facing a large part of two French Armies, that is 80,000 or 90,000 men, only about 20,000 not very efficient Spanish troops and as many Portuguese militia, besides the formations garrisoning fortresses. Badajoz fell on the 6th of April, later than Wellington had expected because the Portuguese authorities neglected to provide the transport necessary to bring up the munitions and stores required for the attack, but after a siege of only twenty-one days. And one reason for the victory of the British was the action of Napoleon; for although self-reliance is a quality essential for the attainment of greatness, when, as so often happens, greatness claims infallibility self-confidence has degenerated from the position of a virtue to that of a mere vice. And Napoleon had written in February from Paris to Marshal Marmont commanding the Army of Portugal that, if "Wellington were to march on Badajoz,

you have a sure, prompt and triumphant means of bringing him back—that of marching on Rodrigo and Almeida.” Marmont, therefore, withdrew from the Tagus a group that had been placed there for the purpose of assisting the French forces that could be spared from Andalusia to raise a siege of Badajoz, an enterprise which alone they would be too weak to effect. The majority of these forces, which had advanced during the siege towards Albuera, also marched back again to Andalusia after the fall of the place, because diversions by Spanish forces against Seville, arranged by Wellington, were causing such unrest that the presence of large numbers of French troops there was imperative.

It had originally been Wellington’s intention to attack the Army of the South after Badajoz had been taken, and, as he wrote immediately after its capture :

“ It would be very desirable that I should have it in my power to strike a blow against Marshal Soult (commanding in Andalusia) before he could be reinforced ; but the Spanish authorities having omitted to provision Ciudad Rodrigo, it is absolutely necessary that I should return to the frontiers of Castille within a short period of time ; ”

otherwise the fortress, which, in accordance with the instructions given by Napoleon, had now been blockaded by the French Army of Portugal, might have been forced to surrender through the starvation of the garrison. The bulk of the Anglo-Portuguese Army, therefore, was obliged to march north-eastward, and its arrival in the area near Ciudad Rodrigo caused Marmont at once to retire to the neighbourhood of Salamanca, a movement that brought to a close the preliminaries of the main operations of the year.

It was difficult enough one hundred years ago to draw the line justly between the responsibilities of the Government and those of the commander in the field, and there is even greater difficulty now when war has more than ever invaded every activity of life. Yet the most satisfactory definition of these responsibilities was perhaps that given even before the Peninsular War, in the middle of the eighteenth century, when it was stated that, while nobody except the general on the spot could judge whether a battle should be fought, the question whether a plan of campaign was to be offensive or defensive was one as much for the Government as for the commander ; for it is evident that only the latter can speak with authority on the condition of his Army and its chances of obtaining success, and only the former is in a position to estimate rightly the political, industrial and financial situations. In 1812, however, it seems that the decisions were left to the commander rather than shared with

him by the politicians, and perhaps the reason was because, as was said at the time, Wellington "commanding a successful army in the Peninsula was the main support of the present administration," in the United Kingdom.

History can be used in two ways for developing military judgment. One is to take a strategical or tactical situation and to modernize it by first endowing the troops with present-day armament, equipment, transport and means of inter-communication, and then working out the problems on this new basis. The other, which is founded on the belief that, since men are the principal factor in war, the problems will not vary in kind, is from moment to moment to try both to enter into the feelings of those who in the past made the decisions, and to regard things from their point of view. The second course will be followed in this article, and an attempt will, therefore, now be made to look at this particular problem from Wellington's standpoint.

At the end of May, 1812, the first question to be decided by the British was necessarily whether during the early summer they were to continue the defensive policy that had previously been followed in the Peninsula, or to change to the offensive, which the possession of the fortresses would facilitate. During the earlier months of 1812 Napoleon had moved large forces—approximately 450,000 troops—eastward through Germany towards the Vistula, for his relations with the Emperor of Russia had for some time been strained and war between Napoleon and Russia was imminent; forces consisting half of Frenchmen, half of Germans, Austrians, Italians, Poles, Swiss, although Austria and Prussia to say the least were doubtful allies. Of the other important countries Sweden had definitely thrown in her lot with Russia; but, owing to the restriction of American trade consequent on the British blockade of the European coasts, the United States, which had been neutral, had in 1811 passed a retaliatory Act under which British goods arriving in the States were to be seized unless the British gave up their practice of searching American vessels. At the same time the Americans apparently prepared for war with Great Britain, which was declared in June 1812, just when Napoleon invaded Russia. Great Britain's economic situation was at this period undoubtedly grave. The harvest of the previous year had been bad, but it had been the same over much of Europe, the price of bread was high, there was much unemployment and some rioting, and Britain's financial credit was so low that the pay of Wellington's troops was both considerably in arrear and difficulty was being experienced in finding money to

meet accounts for requisitions. The Opposition in Parliament, indeed, took so pessimistic a view of the situation that it was in favour of making peace with Napoleon even at the price of accepting humiliation ; and it was evident, therefore, that a reverse in the Peninsula might, unless Napoleon quickly failed in Russia, be followed by what from the British point of view would be a bad peace. As regards the situation in the Peninsula, it was known that the French Armies, which, as has been stated, were spread out over almost the whole of Spain in the endeavour effectively to occupy the country, had been reduced in numbers, although their strength was still estimated at more than 200,000 men ; and it was also supposed that the various groups, or at any rate the majority of them, had been placed under the command of King Joseph, Napoleon's brother, instead of being as had been the case since 1810, under the control of Napoleon himself. Although there were a number of partisans of the French among the Spaniards and some Spanish troops were serving in the French forces in Spain, the people of the Peninsula were still, on the whole, in favour of continuing the war of independence. The Spanish field Armies, including the principal but not the smaller bands of guerillas, were, therefore, fairly strong, numbering upwards of 100,000 troops ; and, in spite of the fact that the formations were not generally efficient, they could, in the wide spaces and over the rugged mountains of the Peninsula, at times give occupation to a larger number of French. The Anglo-Portuguese Army, about 80,000 strong, including the troops in garrisons, was fully equal to the best of the French forces, but the British possessed superior means of transport and their arrangements for maintaining the troops were better than those of the French. Movement, however, was not easy in the Peninsula, for with the exception of the main routes, and some of them were out of repair, the roads were mere field tracks, and, in consequence, often knee-deep in mud in wet weather and ankle-deep in dust during the summer drought. Neither side possessed a signal service, and the only means of inter-communication between the various groups into which the Armies were divided was by dispatch riders. Owing to the hostility of the inhabitants to the French, the British, Portuguese and Spaniards, possessed, however, considerable advantages both as regards the obtaining of information and its transmission and that of orders and instructions. The British had also another advantage, for the naval forces stationed on the northern and north-eastern coasts of Spain could be used to make effective diversions there in cooperation with the Spaniards. Such roughly

were the principal factors that had to be kept in mind when the decision was made as to the nature of the British campaign in the Peninsula in 1812.

The defensive, said Clausewitz, is the stronger form of war, for if the offensive were the stronger form there would be no need ever to use the defensive. Powerful arguments could, therefore, be brought forward in favour of continuing to follow the defensive policy that had up to that period been successfully adopted ; namely, the comparatively cheap policy of tiring out the French by holding fast on the frontier of Portugal as many of their troops as possible through threats of attack, and leaving the Spanish guerillas to wear away the enemy's strength by harassing methods. In the first place it could be urged that it would be reckless to incur hazards in the Peninsula when the struggle must soon be decided in Russia. For, if Napoleon were victorious, the British could hardly hope to continue to withstand him on land ; and, if he failed or were checked, the French forces in the Peninsula would in all probability be further weakened, the opportunity of a victorious attack would then evidently be more favourable, and the British would of course be on the watch and ready to take advantage of any reduction in the strength of the enemy's forces. In addition it could be claimed that to take the offensive before the issue of the struggle in Russia was evident might directly assist Napoleon, for, if the British were beaten—and no one can foretell with certainty the result of a general action—the opposition of the Spanish might collapse. But, so long as the undefeated British Army remained in the Peninsula, the resistance of the Spaniards would probably continue. If Napoleon were victorious in Russia, and if notwithstanding the British resolved to go on fighting in the Peninsula, would they not also be able to do it better in some position such as that at Torres Vedras if they were certain that the ground could be occupied by an army that was intact ? And again, if the decision were against fighting, would not the possession of an intact Army with its backing of an irresistible Navy be a valuable asset in negotiating for peace ? These were some of the reasons that could be offered for the continuation of the defensive policy.

In favour of an offensive strategy, it could be urged that, although likely to be expensive in men and material, an offensive campaign would necessarily stimulate the Spaniards to vigorous action, which would increase the chances of victory. And, if a considerable victory were gained, the success would not only be of great assistance to the Russians but might even offset their failure. For Napoleon

must then either reinforce his troops in Spain at the expense of those in Russia, or incur the military and political disadvantages of being obliged to vacate large areas of the Peninsula, perhaps the whole of it ; and, if the French were forced to leave Spain, France itself would be in danger of invasion. Unless the British were routed, which was unlikely because the French were no longer strong enough utterly to defeat them, their position would not actually have become much worse if a battle were lost ; for the Army though beaten would still be intact and fit to fight any forces that could at the moment be brought against it, and its presence would still be an encouragement to the Spaniards. Lastly, the chances of victory were better than they had ever been before, and victory, besides affecting the situation in the Peninsula and Russia, would cheer and strengthen the people of Great Britain at what might prove to be the turning point of the war.

Many reasons, then, could have been urged on both sides, and the balance really turned on whether Great Britain could afford the offensive and whether, if it were adopted, victory would be probable. Wellington's opinion was in favour of attacking, and he wrote to Lord Liverpool :

" I think I can make this movement with safety, excepting always the risk of a general action. I am of opinion also that I shall have the advantage in the action, and that this is the period of all others in which such a measure should be tried."

Having decided to take the offensive, the next problem was that of the objective, for, as stated in the Field Service Regulations,

" In every operation of war an objective is essential ; without it there can be no definite plan or coordination of effort. The ultimate military aim is the destruction of the enemy's main forces on the battlefield and this governing consideration must always be held in view."

In this particular instance the enemy's main forces were on the Russian frontier—there had, as has been pointed out, been suggestions that Wellington's Army might be moved overseas in that direction—and the French Armies in Spain were, according to Wellington's information, divided into five principal groups, more than one of which could be attacked advantageously. Of these groups the Army of Portugal, under Marshal Marmont, consisting of about 70,000 troops, was standing with its main body in the district between the productive area round Valladolid, the centre of the corn lands of Old Castile, and the walled town of Avila in its prosperous valley, but a detachment was operating far away in the

Asturias. The Army of the South, about 55,000 strong, under Marshal Soult, was even more dispersed, for 20,000 troops were under Drouet in the stony, arid, heathlands of Estremadura to the east and south of Badajoz, 16,000 men were blockading Cadiz, where the Spanish Government had taken refuge, there were garrisons in Grenada, Malaga, Ronda and other places, and about 15,000 men were round wealthy Seville. On the fertile east coast, under Marshal Suchet, about 30,000 troops were holding Catalonia and Aragon, and, approximately, the same number was near Valencia, which had just been captured by the French. The Army of the North, 50,000 strong, was holding the line of communication in the hilly space from Burgos to Bayonne and the territory near it ; and, lastly, the Army of the Centre, 20,000 men, was standing in the agricultural district in the south of Old Castile and in and round the capital Madrid. It was, as has been stated, thought that King Joseph had been appointed commander of the French Armies, perhaps with the exception of that under Suchet, but it was known that the Marshals would not obey him willingly, for, as has been pointed out, since 1810, they had, except for instructions sent to them from Paris, been independent.* It was also known that Soult was not likely to cooperate well with Marmont who, for reasons given above, had not marched to the relief of Badajoz, which Soult bitterly resented.

Of all the groups into which the French Army was divided only two were immediately in contact with the British land forces : the Armies of Portugal and the South. And Wellington believed that of these two Armies the Army of Portugal

“ can produce the largest number of men in a distant operation. Soult must maintain the blockade of Cadiz, as long as he remains in Andalusia, and in effecting that object he must keep garrisons in Seville, Malaga and other points ; and, if he is absent from the province for any length of time, he must leave a body of men to observe the [Spanish force under] Ballesteros [he usually operated near the Sierra Morena], who would otherwise be able to effect some operation attended by permanent injury to his objects in Andalusia. Marmont, however, has no object, as he has repeatedly been told in letters from Berthier [Napoleon's Chief of the Staff], anything to attend to but the British Army. . . . Marmont's then, being what may be called the operating army, the movement into Andalusia [which had previously been contemplated] . . . would be a false movement, and this must by all means be avoided. . . .”

Wellington also thought that, since the garrison of Ciudad Rodrigo was not in a satisfactory state, and since the harvest in the areas to

* King Joseph had only controlled the Army of the Centre.

the north of the Tagus was much later than that to the southward, which would affect the mobility of the French Armies operating in Castile, to attack Marmont would be more advantageous than to advance against Soult. And he went on : " I propose, therefore, as soon as ever the magazines of the Army are brought forward . . . to move forward into Castile, and endeavour, if possible, to bring Marmont to a general action." Wellington's objective, then, was the Army under Marmont against which offensive action was to be undertaken, for the defeat of this Army would be a step forward towards that of the defeat of the other French forces in the Peninsula, and their overthrow might indirectly be of assistance to those whose task it was to beat the main Armies, which were about to invade Russia. And he also hoped by an effective stroke against Marmont's Army to achieve what, from the political and economic point of view was important, the liberation of southern Spain, by obliging Soult to bring his forces to Marmont's assistance.

The objective having been taken the next problem was how to attain it. " Concentration of superior force, moral and material, at the decisive time and place . . . are essential for the achievement of success," which is intensely true so long as it is remembered that concentration must be relative not absolute, relative that is to the administrative situation, relative also to the political, psychological and physical conditions, for overconcentration or injudicious concentration may be as grave an error as dispersion of effort. Suppose, for instance, that it had been within the power of King Joseph to bring together all the French troops in the Peninsula against Wellington, and in Wellington's power to collect all the British, Portuguese and Spanish forces to meet them, then on the French side there would have been a practically homogeneous, well-organized and well-trained force more than 200,000 strong, and on Wellington's side a force probably of somewhat lower strength but composed of troops of every grade of efficiency, of every kind of organization and of three nationalities ; and many of these troops would have been unwilling to leave the localities where they had been raised. Concentration then would have been disadvantageous to the Allies, whose forces would have been less efficient for concentrated action. On the other hand, as we know to our cost, small bands of irregulars, like the Spanish guerillas, operating in localities with which they are familiar, can at times paralyse larger numbers of trained men, and not to allow and to encourage them to do so would evidently be injudicious. Concentration, therefore, only means the largest numbers that can advantageously be brought together for a par-

ticular purpose, and it must be considered in connection with economy—that is, with the employment of the forces to the best advantage.

The French Army in the Peninsula, with the exception of the group under Marmont, was an Army of occupation. The allied forces, with the exception of Wellington's Anglo-Portuguese Army and the troops in garrisons, were engaged in the endeavour to prevent this occupation from being effective, and consisted mainly of local groups harassing the invader. In Catalonia, for instance, there was a force of 8,000 men under General Lacy acting as support to local levies called *Somatenes* who rose on favourable occasions ; in Aragon there were from 6,000–8,000 *guerillas* under Duran and the *Empecinado*, who were at times joined by another leader of *guerillas*, Mina, who operated with from 3,000–5,000 men between Navarre and Aragon ; and these groups with the smaller bands held fast at least 30,000 French troops. Southward there were about 8,000–10,000 Spanish troops, including bodies under Bassecourt, Villa Campa, Roche and O'Donnell, near Alicante ; in Murcia there was a force under Freyre, and there were 3,000–4,000 men in Majorca. Southward again there was a small British garrison in Cartagena, farther east there was the garrison of Gibraltar, there was a Spanish force holding Tarifa, and there were 15,000 troops, including a British brigade, in Cadiz. There was also the group of about 10,000 men under General Ballesteros, which, as has been stated, hung about the Sierra Morena, there were two small bodies, about 5,000 men in all, under Penne Villamur and Morillo, which frequented the lower valley of the Guadiana, and a force of from 3,000–4,000 men under Carlos de Espana was near Ciudad Rodrigo. In north-western Spain in Galicia, and excluding the garrisons of Corunna, Ferrol, and Vigo, there were about 16,000 troops, who at first were under General Abadia, although General Castanos was supposed to control the forces both in Galicia and Estremadura ; and in the area round the roads leading northward to Bayonne, and also on the coast line there was Mina's band and the Spanish Army under Mendizabel, which, in the main, was composed of the large bands of *guerillas* under Porlier and Longa, but comprised a number of smaller groups of irregulars also. It is sufficiently evident, as indicated above, that these groups could most economically be employed in the areas where they were operating, concentration, therefore, could only on the whole be made with Wellington's Anglo-Portuguese Army and any small Spanish bodies that were close to it. At this period, excluding Portuguese militia, the force that Wellington could put

into the field, after detailing garrisons for the Portuguese fortresses of Elvas, Almeida, Abrantes and others, and ensuring that the Spanish fortresses of Cadiz, Badajoz, Ciudad Rodrigo and other important places were adequately held, amounted to nine infantry divisions, three or four independent infantry brigades, and seven cavalry brigades, a total of about 60,000 fighting men, for many were sick, with some 70 or 80 guns. Wellington may have had the means of keeping the whole of this force supplied with food and munitions, although owing to shortage of cash, and cash would be needed to induce the Spaniards to bring in provisions in areas that had been under French occupation, this is doubtful. But its concentration would have involved the removal of all British forces (about two divisions under General Hill each 6,000 strong) from the area to the south of Lisbon, and Soult would then have been free to move the troops that he could spare against Badajoz. And, if it fell quickly, Soult could then either send them against Lisbon in cooperation with the Army of the Centre ; or, if Marmont were not brought to battle before the harvest in Castile was ripe, could, for there would be food for all of the troops when the harvest had been reaped, move directly to his assistance, again in cooperation with the Army of the Centre. It would, therefore, be economical to make a detachment adequate to prevent, or at any rate to delay, such movements ; and, if so, concentration would only be to bring the balance against Marmont, which actually was what Wellington did when he took the field with 30,000 British and 18,000 Portuguese troops, and about 3,500 Spaniards.

Like a player at cards a general should continually be considering his hand, the resources that can be used and the most effective and economical way of doing so ; and, unlike a card player, he should also continually be trying to overlook the hand of his adversary. As has been pointed out, Wellington's resources, or those that he could influence, were many, for besides his own troops and the Spaniards there were the resources of Britain's greatest asset, sea-power, and the coastline of the portions of Spain that were in the enemy's hands was long. Now in order to economize, to use these various forces to the best advantage, it would obviously be judicious if measures were taken if not for "the purpose of compelling a dissipation of that [the strength] of the enemy," which would be very difficult, at any rate to hinder or prevent its concentration. To this end arrangements could be made, as was done by Wellington, with the Spaniards for activity to be shown by the troops operating in the north, and also in the south in conjunction with Hill, against

the forces of the French, and arrangements could also be made with the commander of the British squadron off the northern coast of Spain to cooperate with the guerillas by bombarding or attacking suitable localities. As regards the eastern coast, it happened that, at this period, there was a force of Anglo-Sicilian troops guarding Sicily against the French, and now that Napoleon had practically denuded Italy of troops for his Russian expedition the British Government wished to employ 8,000 to 10,000 of these in Spain ; and this force could advantageously be landed, with the help of the Navy, on the east coast, preferably in Catalonia, and could then, in conjunction with the British squadron and the Spaniards, attack the communications of Suchet's Army. If this were done, Suchet would certainly be obliged to use a portion of his field forces in order to clear them, and might thus be prevented from sending troops to the assistance of Marmont.

Economy of force evidently implies cooperation, and cooperation is best assured by unity of control. But when, as in 1812, unity of control does not exist, cooperation can only be achieved through arrangements with various independent authorities, in this case the Spanish Government at Cadiz, the British naval commanders, and through the British Government with Lord William Bentinck, the commander of the force in Sicily. In addition, the arrangements for cooperation must be such as will be acceptable to the independent authorities, for in war as in other activities of life the difficulty lies not in discerning the ideal but in justly estimating what is practicable.

Mobility is a physical characteristic, and it is obvious that its possession must be favourable to an army, for the force that can move at greater speed may be able either to make or to seize an advantageous situation or to avoid one that may lead to misfortune. Mobility consists, of course, of two elements, the movements of the fighting troops, into which the factor of *moral* enters, and the movement of their supplies and munitions ; the first being to a large degree dependent on the second, and both to some extent on the control of communications. In spite of the great marching power of the French, superior mobility, as has been pointed out, was in 1812 possessed by the Anglo-Portuguese Army owing partly to better means of transportation both on land and by water up the Tagus and Douro, and partly to better arrangements, that is to the well-organized line of communication, which had been provided by Wellington. Further, Wellington in the middle of May sent out a force under General Hill which destroyed part of the bridge—the whole bridge was nearly 200 yards in length and high above the

river—over the Tagus at Almaraz, although the place was held by the French. And this, as he wrote,

“ gives great security to our right in any forward movement into Castile. The enemy have in truth now no good military communication across the Tagus excepting the bridge at Toledo. I know the bridges of Arzobispo and Talavera cannot be deemed military communications for large corps, and scarcely for any bodies of troops marching with cannon and carriages.”

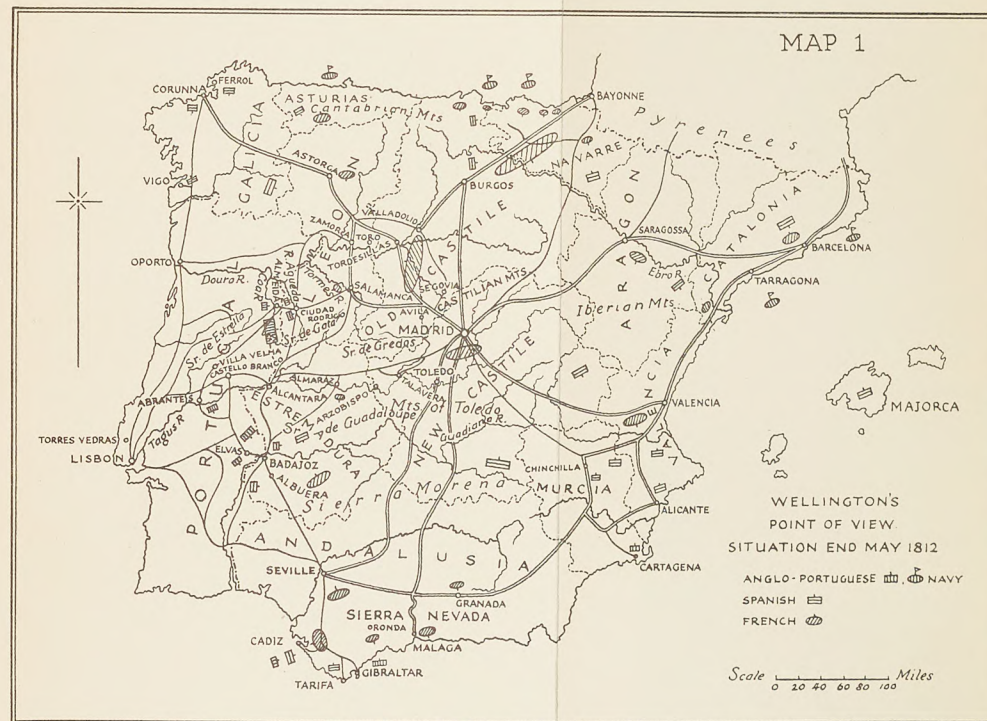
In addition, Wellington had improved his own communications across the Tagus by causing the bridge at Alcantara to be repaired ; its total length was 670 feet and it stood 200 feet above the wild gorge of the Tagus.

Field Service Regulations tell us that the first responsibility of a commander is the security of a force and of its communications ; that is, he must both take the ordinary precautions to see that his troops are not caught unawares, and he must also adopt measures to prevent the enemy from doing so, such as the destruction of the bridge at Almaraz. The result of this enterprise together with the physical difficulties of the routes leading westward along the middle Tagus made it, wrote Wellington,

“ not very probable . . . that we should be turned by our right ; and if reinforcements should be drawn from the north to press on our left [Wellington had sent a small force of Portuguese under Silveira to blockade the French garrison that was holding Zamora, and a cavalry brigade under D'Urban to guard Silveira's left and rear], we shall always have our retreat open upon Ciudad Rodrigo or by the valley of the Tagus,”

that is, through Alcantara and Villa Velha.

A commander whose army is secure is relieved from this care and can freely take thought how to surprise the enemy, which “ is the most effective and powerful weapon of war.” But to bring surprise about is necessarily difficult, for the enemy will be as much concerned for the security of his forces as we are anxious to disturb it ; and if there is to be surprise, something, therefore, must be done that is unexpected either as to place or time. After the capture of Badajoz and Marmont's retreat from his raid into Portugal four divisions of Wellington's Army were spread out behind the Agueda and the Coa, one was at Castello Branco ; and two divisions under Graham that had been near Villa Velha had again been sent towards Badajoz for the purpose of covering Hill's attack on Almaraz from interference by the force under Drouet. And this movement by Graham, coupled with the dispositions of the other divisions and the raid on Almaraz also, would tend to mislead the enemy as to



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Wellington's intentions, for they might be the prelude of an advance into Andalusia. In addition, Wellington also tried to confuse Marmont by making the necessary preparations for the offensive, the bringing up of stores and supplies, with due secrecy.

It is often, perhaps even usually, possible after the event to suggest improvements in a plan of campaign, for human foresight is at best dim and circumscribed ; but few will find it possible to do so in regard to the plan made by Wellington in the spring of 1812 for every measure had been taken, every combination made, that before the event would be likely to ensure success. War would, however, be much easier than it is if everything fell out as desired, and it was only in the nature of things that Wellington should be disappointed in the conduct of some of those concerned in carrying out these wide combinations.

(To be continued.)

BATTLE HONOURS

A SURVEY OF THE SYSTEM UNDER WHICH THEY HAVE BEEN GRANTED

BY MAJOR T. J. EDWARDS

NOTHING is more mystifying to the student of regimental histories than the manner in which war service of regiments in the eighteenth and early part of the nineteenth centuries is reflected in the names of battles or campaigns on Regimental Colours or appointments. One may read in the dispatches of those periods of a score of regiments participating in the same operation, all receiving equal commendation from the Commander-in-Chief, yet, on comparing the battle honours borne by those regiments it will be found that only one, or perhaps a small proportion of them at most, have been granted the distinction in commemoration of the action. A case in point is the honour "Wilhelmstahl."

The battle of Wilhelmstahl was fought on the 24th of June, 1762, the British force comprising the following regiments: First, Coldstream and Third Guards, 5th, 8th, 11th, 24th, 33rd, 50th, 87th, 88th, and flank companies, 12th, 20th, 23rd, 25th, 37th and 51st Foot. Of all these the only one to which the honour "Wilhelmstahl" has been granted is the Northumberland Fusiliers. No one grudges The Fighting Fifth their distinction, but it is difficult to understand why the other regiments were not similarly rewarded.

From this example, and more could be cited, it is quite clear that in the early days battle honours were not awarded in accordance with any recognized principles. In fact, it appears to have been left to regiments to make application as the spirit moved them, hence it is not surprising that many anomalies exist to-day, although there is ample evidence to show that official steps have been taken to give regiments their due, e.g. the grant of "Corunna" to the Duke of Wellington's Regiment, Prince of Wales's Volunteers and The Queen's Own Cameron Highlanders in 1908 (Army Order 51), ninety-nine years after the action was fought, and the grant of "Gibraltar, 1779-83" to the Highland Light Infantry in the same year (A.O. 73/1908).

Owing to the absence of exact data of some campaigns of the eighteenth century, it would be impossible to re-write the history of the British Army and grant to each regiment its full share of honours, neither are regimental histories of this period very helpful, because it was not until the publication of Horse Guards letter of the 1st of January, 1836, directing regiments to compile histories, that any real interest was taken in the matter. Although to-day many regiments bear distinctions in commemoration of eighteenth-century battles (e.g. for Marlborough's campaigns), there were only five regiments which had been granted battle honours before 1800. This circumstance was probably due more to lack of information on the subject than to any reluctance on the part of regiments to apply for grants (particularly in the case of regiments serving abroad), for there is no record of any general official instruction being published on the subject.

The granting of these distinctions falls into six main phases :

1. The "early" period, i.e. between the date of the grant of the first honour and 1882.
2. The "Alison Committee" of 1882.
3. The period between 1882 and the creation, at the War Office, of the "Permanent Advisory Committee on Honours and Distinctions" in 1907.
4. The Permanent Advisory Committee.
5. The "Battles Nomenclature Committee" (1919) and the "Battle Honours Committee" (1921) for the Great War.
6. The "Honours and Distinctions Committee" again.

1. THE "EARLY" PERIOD

The battle of Emsdorf was fought on the 16th of July, 1760, and in 1768 a Clothing Warrant was published which contained some new features, the most important being the grant of "Emsdorff," to be borne as a motto, on the standard of the 15th Light Dragoons (raised by Colonel George Eliott) in commemoration of its distinguished services in the operation. Fifty years later grants of battle honours became common, but this regiment (later the 15th Hussars and now the 15th/19th Hussars—amalgamated 1922) was the first in the British Army to bear a battle honour on its Standard or Colour.* In fact, it is probably the first regiment in the world to

* The Royal Irish Regiment have the distinction of being the first regiment to have a choice of any kind in commemoration of war service, in that King William III granted them "The Lion of Nassau" as a badge, with the motto "Virtutis Namurensis Præmium" to be borne on their Colours for distinguished services at the siege of Nassau in 1695. This grant was, however, quite exceptional, and cannot be regarded as initiating the regular practice.

bear this type of distinction, for a careful search among the records of the chief foreign armies has not brought to light any evidence to dispute this assumption. A statement from the French military authorities shows that the first battle honour granted in the French Army was in 1792 to commemorate Valmy and Jemmapes. A similar statement from the German authorities shows their first honour was granted in 1808—"Colberg, 1807," to commemorate the defence of Colberg. The first honours granted by the Honourable East India Company to their troops were for the First Burmese War, 1824-26; these were granted in 1826.

Emsdorff, however, is not the earliest campaign to be commemorated in this manner. This distinction belongs to "Tangier, 1662-80," granted to the Queen's Royal West Surrey Regiment and 1st The Royal Dragoons.

After Emsdorff the next grant of an honour was in 1784, when King George III was "graciously pleased," in commemoration of the glorious defence of Gibraltar during the late memorable siege of that important fortress (1779-83) under Sir George Eliott (afterwards Lord Heathfield), to permit the 12th, 39th, 56th and 58th Regiments, which made a part of it, to have the word "Gibraltar" placed upon their Grenadier and Light Infantry caps, the accoutrements and drums, as likewise upon the *Second Colour* of each of those regiments, just underneath their respective numbers" (Horse Guards letter—28th of April, 1784). This honour was amended to "Gibraltar, 1779-83," to distinguish it from "Gibraltar, 1704-5," granted to certain regiments under Army Order 180 of 1909.

It will be noted that the first two grants of honours were closely connected with Sir George Eliott, but unfortunately there is no record extant showing to whom credit is due for initiating the practice.

The next grant of an honour was on the 1st of January, 1801, when the 12th, 20th, 23rd, 25th, 37th and 51st Regiments were granted "Minden." This was followed the next year by the grant of an honour in commemoration of the Egyptian Campaign of 1801. On this occasion the distinction took the form of a badge to be worn on the Colours—a sphinx within a wreath of laurel, with the word "Egypt" over.

On the 17th of February, 1807, the 76th Regiment was granted "Hindoostan" and the elephant in commemoration of their services in India.

Following the precedent established by granting "Gibraltar" and "Egypt" immediately on the conclusion of the campaigns, we

find "Maida" (4th of July, 1806) granted on the 24th of February, 1807. The "Maida Gold Medal"—the first of the Army Gold Medals, although the Navy had them since 1794—was not granted until the 22nd of February, 1808, just a year later.

Maida is unique in that it was the first campaign to be commemorated, officially, by both Colour honour and medal. Medals were awarded during Elliott's defence of Gibraltar, but these were "Regimental medals," and it was not until 1850 that a clasp was authorized for the Army General Service Medal for "Egypt" (1801). No medal was awarded for "Emsdorf."

Following on Maida the next campaign was the Peninsula, the first action of which was the battle of Roliça (Roleia), 17th of August, 1808, followed by Vimiera (21st of August, 1808), Corunna (16th of January, 1809) and Talavera (27th/28th of July, 1809). The grant of a gold medal for Maida being fresh in the minds of both the staff at the Horse Guards and the General Officers serving in the Peninsula, it is not surprising to find that on the 9th of September, 1810, a General Order was published granting Gold Medals for the above-mentioned actions. It was, no doubt, the grant of these medals, coupled with grant of the honour "Gibraltar" in 1784, that led to the grant of honours for the early battles of the Peninsula. The consideration of distinctions for this campaign appears to have given rise to the consideration of campaigns since the siege of Gibraltar, 1779-83, for we find that "Lincelles" (18th of August, 1793) was granted to the Guards Brigade in 1811. The first Peninsula honour appears to have been "Corunna," granted to the 59th Regiment (East Lancs.) in April, 1812. This makes it difficult to understand upon what system battle honours were granted at this period. Medals were granted for Roleia, Vimiera, Corunna and Talavera in September, 1810, and one would naturally expect to find some connection between medal and honour, but no honour was granted for Roleia until 1817 (to the 5th Regiment), for Vimiera until 1816 (to the 36th Regiment), for Corunna until 1812 (to the 59th Regiment) and for Talavera until 1816 (to the 23rd Light Dragoons—disbanded 1817). A study of the *London Gazettes* reveals that only a few Peninsula honours were granted during the campaign, but it is significant to find that the campaign honour "Peninsula" was granted in April, 1815, exactly a year after the last battle of the war (Toulouse, 10th of April, 1814), although there was no "Peninsula" clasp to the gold medals or crosses or to the General Service Medal (the latter authorized in 1848).

The Army had hardly got rid of the Peninsula campaign before

it had to fight at Waterloo, and in the interim there was little time to give consideration to distinctions for the former. Something appears to have been done, however, for the "Waterloo" honour was granted within six months of the battle, i.e. on the 8th of December, 1815, and three months *before* the grant of the medal on the 10th of March, 1816. In this respect it resembles the Maida campaign, the honours for which were granted in February, 1807 (a few in February, 1808), while the medal was not authorized until the 22nd of February, 1808.

After Waterloo, when regiments had time to settle down, and, no doubt, to a great extent prompted by the grant of the campaign honours of "Peninsula" and "Waterloo," grants of battle honours became numerous, as the *London Gazette*s of the period testify. The system upon which such grants were made is, however, difficult to discern. One thing is sure though, and that is, it was left to regiments to apply for these honours, as no general awards were made. It might also be assumed that at some time it was decided that a regiment could not be granted a Peninsula honour unless the Commanding Officer had been awarded a gold medal for the battle. This assumption is based upon a submission to Queen Victoria in 1844 on behalf of the 62nd (or Wiltshire) Regiment for the honour "Nive," wherein it is stated—"it appearing that the officer who then commanded the Regiment—the late Major-General Nathaniel Blackwell—received a medal for his services on that occasion." The honour was granted.

If this assumption is correct there is at least one exception to the rule, that is the grant of "Arroyo dos Molinos" to the 34th (Border) Regiment. The fight at Arroyo dos Molinos took place on the 28th of October, 1811, during which the 34th distinguished itself by capturing the 34th French Regiment. As a distinction for its services the 34th was permitted to wear a red and white tuft (the colour of the French 34th tuft) in its shako, the remainder of the infantry wearing a plain white ball tuft. In 1845, however, the red and white tuft was adopted generally for the infantry, therefore the 34th lost their distinction. To compensate them for this they were granted the honour "Arroyo dos Molinos." No Gold Medal was granted for this operation, neither was a clasp to the Army General Service Medal authorized for it.

For many years after the conclusion of the Peninsula campaign honours for that war continued to be granted; sometimes the *Gazette* notice referred to single regiments and sometimes to several regiments. From this it is safe to assume that regiments generally

were making an effort to secure all distinctions to which their war service justly entitled them.

Following Waterloo the next general grant of battle honours was for the First Burmese War (1824-26), and it is significant that the Honourable East India Company granted honours to their troops in April, 1826, whereas those to the British Imperial troops were not granted until the following December (*vide London Gazette* of the 29th of December, 1826). This apparent tardiness on the part of the home authorities is probably due to the relative distance the dispatches had to travel to reach the respective governing bodies of the British and Indian troops. What is worthy of note is the fact that the East India Company had adopted the principle of granting battle honours to their troops. Moreover, they appear to have taken active steps to have the record of past victories emblazoned on the Colours of regiments engaged therein, for we find a Governor-General's Order issued on the 3rd of February, 1829, granting honours for "Plassey" (23rd of June, 1757) down to "Seetabuldee" (27th of November, 1817).

From the grant of "Peninsula" all grants for subsequent campaigns were general in nature, and one can usually trace some connection between the Colour honour and the commemorative medal, e.g. those for Burma, 1st Afghan War (1838-40), First China War (1840), First Sikh War (1845-46), Crimea War (1856-7), Indian Mutiny (1857-8), etc., but it was not until 1882 that the Home Authorities began to look back to see what campaigns should be commemorated. This brings us to the appointment of the Alison Committee.

2. THE ALISON COMMITTEE

In 1882 the first battle honours committee was appointed under the presidency of Major-General Sir Archibald Alison, Bt., K.C.B. The Committee was directed :

"to consider the claims of the Regiments which took part in

- (1) The campaigns of the Duke of Marlborough (1702-1711),
- (2) The wars between the British and French in America (Louisberg and Quebec),

to be allowed to commemorate on their Colours the names of the important victories gained in those wars, which are at present unrecorded."

In their Report the Committee stated that their working principle was :

"That in dealing with events so long past, the names of such victories only should be retained, as, either in themselves or by their results, have

left a mark in history which renders their names familiar, not only to the British Army but also to every educated gentleman."

Guided by this principle the Committee set to work, but, according to their Report, they were soon in difficulties, because :

" Owing to the remoteness of the date (of the campaigns of Marlborough) and to the habit which prevailed at that time of mentioning in dispatches simply the total number of squadrons or battalions engaged, without naming them, a considerable amount of investigation has been necessary to arrive at a full list of all existing regiments entitled to all or any of the names already specified. In one case, that, namely of Lille, this has been found impossible of accomplishment."

The Report also refers to another principle, viz. :

" In the British Service the principle exists that when distinctions are conferred for a siege, they should be granted not only to the Corps absolutely conducting, but also those covering, it."

The Committee recommended that certain regiments should be granted " Blenheim," " Ramillies," " Oudenarde," " Malplaquet," " Quebec " and " Louisberg." Their recommendations were adopted and only one regiment's name has been subsequently added to their list—viz. The Wiltshire Regiment—" Louisberg " (under Army Order 97 of 1910). The first four battles occurred during the war of the Spanish Succession during which Gibraltar was besieged, yet the distinction " Gibraltar, 1704-5," was not granted until 1909 (Army Order 180), over 200 years after the event.

The Alison Committee was ordered to re-assemble during the summer of 1882 to consider the claims of certain regiments to " Dettingen," which was fought on the 27th of June, 1743, during the war of the Austrian Succession. Their recommendations were adopted and the list of regiments now bearing the honour is still the same.

This finished the work of the Alison Committee.

3. THE PERIOD BETWEEN THE ALISON COMMITTEE AND THE CREATION AT THE WAR OFFICE IN 1907 OF THE " PERMANENT ADVISORY COMMITTEE ON HONOURS AND DISTINCTIONS "

Although there is no trace of a Committee it is obvious that the War Office was still at work endeavouring to do justice to regiments which had taken part in more recent campaigns, for the following awards were granted under General Order 252 of 1882 :—

" South Africa, 1835."

" South Africa, 1846-7."

" South Africa, 1851-2-3."

Strangely enough "South Africa" had been granted under General Order 57 of 1881 for the 1877-79 campaign, the date "1877-8-9" being added thereto by General Order 252 of 1882, this being necessary to make the honours distinctive.

Before we arrive at the next phase we find that batches of honours were awarded for the Egyptian campaign of 1882-84 and the Nile campaign of 1885-86; a General Order of 1889 granted honours for Indian campaigns dating back to 1780-1792 (e.g. Mysore, Carnatic, Sholingbur), which indicates that persistent official efforts were being made to give regiments their due. (In this particular case the authorities were probably prompted by the action of the Indian Government who, in 1829—as already shown—granted honours for past Indian Campaigns.) Honours for "Burma, 1885-87," were granted in 1890, those for "Tirah" in 1890, and those for the South African War, 1899-1902, in 1905. During this time, however, honours were granted for the Peninsula and other far-off campaigns, such as "1800" to the Royal Malta Militia for the siege of Valetta in that year, "St. Vincent" to the Welsh Regiment, and four eighteenth-century campaign honours to the Royal Munster Fusiliers.

4. THE PERMANENT ADVISORY COMMITTEE

Applications for battle honours from regiments who considered they had claims for campaigns of long ago were still being received at the War Office up to 1907, when it was decided to set up a permanent Committee to investigate such claims and to maintain some uniformity in the grant of honours. This Committee was designated the "Permanent Advisory Committee on Honours and Distinctions," and started its career under the Chairmanship of Major-General Sir H. S. G. Miles, K.C.B., C.V.O., then Director of Recruiting and Organization. A notable member of the original Committee was the Hon. J. W. Fortescue (Librarian, Windsor Castle), the British Army historian.

The creation of this Committee was a great advance in the system of dealing with claims, and it set to work to put the matter on a firm, common-sense basis. Its recommendations have not always been popular, but it can safely be stated that their investigations have been thorough and their conclusions, based on the materials at their disposal, uniformly just.

The work of this Committee was confined entirely to straightening out history as recorded on Regimental Colours, and their recom-

mentations are reflected in the grants of honours for "Tangier, 1662-80," and "Namur, 1695" (A.O. 45/1910), such eighteenth-century battles as "Gibraltar, 1704-5," "Warburg," "Beaumont" and "Willems" (A.O. 180 and 211/1909), and West Indian Campaigns — "Havannah," "Guadaloupe," "St. Lucia" and "Martinique" (with dates added to the last three) (A.O. 295/1909), and a belated batch of further Peninsula honours (A.O. 218/1910).

The present title of the Committee is the "Honours and Distinctions Committee."

5. THE BATTLES NOMENCLATURE COMMITTEE AND THE BATTLE HONOURS COMMITTEE

The magnitude of the Great War was such that it was obvious the ordinary Honours and Distinctions Committee could not cope with it. Further, every part of the Empire was concerned and this needed representatives from the dominions. To meet this situation two distinct committees were created :

- (a) The " Battles Nomenclature Committee " which determined generally what operations were to be classified as " battles."

This Committee was appointed in 1919 under the presidency of Major-General Sir John Headlam, K.B.E., C.B., D.S.O.

- (b) The " Battle Honours Committee " which allotted " battle honours " to regiments.

This Committee was appointed in 1921 under the Chairmanship of General Sir A. J. Murray, G.C.M.G., K.C.B., C.V.O., D.S.O.

The activities of these two committees are of such recent date, and a record of their work and recommendations so easy to obtain, that no further reference will be made to them herein. See the Report of (a) and Army Order 55 of 1925 regarding (b).

6. THE POST-WAR HONOURS AND DISTINCTIONS COMMITTEE

When the Headlam and Murray Committees were dissolved, it was necessary to have some corporate body to deal with queries arising from their recommendations and consider further claims ; this work naturally fell to the lot of the Honours and Distinctions Committee, the lineal descendant of the Committee created in 1907.

LOST ARMIES*

II

DESTRUCTION DUE TO DEFECTIVE INTELLIGENCE SERVICES

BY COLONEL SIR HAROLD PERCIVAL, K.C.M.G., C.B.E., D.S.O.

IN November, 1807, John, Prince Regent of Portugal, found himself in the trying situation of having to decide which side he would take in the war between England and France. His policy was to remain at peace with both, but it did not fit in with that of the belligerents. Napoleon had demanded that he should join the Continental League, declare war on England and confiscate English property. War with England, however, meant the complete stoppage of overseas trade, entailing heavy losses to Portugal. Moreover, Portugal was on very friendly terms with England. The Prince Regent would, no doubt, have declined to comply with Napoleon's demand but for the fact that the French Army under Junot, supported by Spanish troops, was on its way to Portugal. Though in numbers this force was not formidable, it was backed by the prestige of the great Emperor, and therefore constituted a real menace. The Prince, therefore, sought to temporize. Half-hearted measures were taken to exclude English trade, whilst at the same time assurances were given to Lord Strangford, the British Minister at Lisbon, that this course of action, being imposed by *force majeure*, was not intended in an unfriendly spirit. Orders were also given to the Portuguese forces not to oppose the advance of Junot. It was hoped that Napoleon would accept this attitude as a satisfactory answer to his demand and would refrain from further hostile action. But this temporizing policy was of no avail. The French continued their advance towards Lisbon; and an English squadron, in the flagship of which Lord Strangford had embarked, began the blockade of the Portuguese coast. In its attempt to stand well with each side, the

* A previous article under this title appeared in the *Army Quarterly*, January, 1928.

Portuguese Government was rapidly drifting to a state of war with both.

At this stage Napoleon is said to have made a false move. On the 11th of November he caused a statement to be published in the *Paris Moniteur* to the effect that: "the House of Braganza had ceased to reign in Europe." A copy of this was sent from London and reached the Admiral and Lord Strangford on the 24th of November. With this document in their possession they landed secretly at night, met the Prince Regent and were easily able to convince him of the futility of adhering to the French cause. It was obviously too late to resist invasion, since Junot was already within striking distance; but it seemed that the Court, the Treasury, and a considerable portion of the Army might be saved by instant flight to Brazil in the Portuguese Fleet, which was standing by for just such an emergency. Once the decision to do this was taken there ensued a state of chaos in the port owing to the desperate rush made by courtiers, merchants and others to get away before the enemy arrived; the landing stages at once became blocked to such an extent with fugitives and baggage, that the troops detailed to accompany the Royal party found it impossible to embark. In one case, the colonel was the only member of his regiment to do so, and other units did not fare much better. The Prince Regent, like his courtiers, was panic stricken. Indeed, his haste was such that he made no ceremonious departure, but drove down to the quay accompanied by his nephew and one servant, and followed by the rest of the Royal family, had to force his way through the crowd and scramble on board as best he could. The Portuguese Fleet put to sea in the nick of time, escorted by the British squadron, but it left behind it the majority of the troops whom it had been intended to convey.

The Portuguese forces suddenly found themselves abandoned. The regiments, therefore, quietly disbanded themselves or remained in their barracks to await whatever fate was in store for them at the hands of the French invaders. In strength they were superior to the latter, and we know from subsequent events that under good leadership they were capable of meeting Napoleon's troops on equal terms. As Junot said later on, at Busaco: "They fought like Englishmen in Portuguese uniforms." Moreover, the mountainous nature of their country was in their favour and rendered the defence of the frontier a comparatively easy task. But the Government was overawed by the renown of the Emperor and his Army, and so allowed the country to be seized by Junot without a single shot being fired in its defence.

Let us now consider the dreaded Army which had so terrified the Portuguese that they abandoned the country without resistance.

On the 30th of November, Junot marched into Lisbon at the head of only 1,500 foot soldiers, all that he could muster from his total force of 26,000 men for this important occasion. They did not make an imposing show, resembling an armed horde of invalids rather than an army. Bootless, their uniforms in rags, with arms rusty and unserviceable, the soldiers were so worn out by hunger and fatigue that they were unable to march in military formation in spite of the beat of drums. They were unaccompanied by artillery or cavalry and the general condition of the force which took possession of Portugal's capital in the name of the great Emperor was such that it would have been unable to fire a shot, or to put up any defence to an attack even by a handful of men. But these 1,500 men were at any rate able to enter the city unaided, whereas many of those that followed were not even able to do this. During the next three weeks some 8,000 stragglers on mules or in carts were brought in by peasants, the majority deficient of clothes, boots and arms, and all in a starving and exhausted condition, quite unfit for service, and, in fact, generally unable to look after themselves. Though a number eventually recovered, a considerable portion of the French Army had vanished permanently.

Such was the condition of the force to which the Portuguese Army, in obedience to orders from its Government, surrendered its country. Too late the population realized that it had allowed itself to be terrorized by an army without value as a fighting force which existed, for the moment, in name only. And yet the march of Junot's troops through Spain into Portugal will ever rank as one of the most wonderful military achievements. From the very beginning they were faced with difficulties which would, in ordinary circumstances, be regarded as insurmountable. The hardships suffered by them, ill-shod, badly clad and underfed, as they were, during their crossing of the trackless and inhospitable mountain ranges, where neither food nor shelter was available, and exposed to almost ceaseless rains and snow, are indescribable. The conditions daily became more and more unendurable. But the troops persevered and pressed on, and had their reward in the final attainment of their object—the occupation of Lisbon before either the Portuguese or English could organize an effective resistance.

But what of the cost? The fact that the force had for the moment ceased to exist as an "army in being" was, in the circumstances, not of serious consequence. There was ample compensation

in the fact that it had occupied the enemy's capital in the rôle of conqueror. What was of vital importance was that in carrying out this glorious achievement it lost much of its prestige, which it never recovered in the long drawn-out campaigns which were to follow. The latter part of its march showed convincingly to both Portuguese and Spaniard that the French were by no means as formidable as had been supposed. While the whole country was witness to the condition to which Junot's Army had been reduced, the stupendous difficulties it had overcome and the magnitude of the feat it had performed were not appreciated. There was the inevitable reaction of sentiment. The people were ashamed of having surrendered their country to this feeble foe. The seeds for a revolt were sown. Never again would the Emperor's troops be assumed to be invincible.

In view of the far-reaching consequences, it is worth while to inquire into the reasons which were responsible for Junot's force being reduced to this state, and to ascertain whether they were such as could have been avoided. Several reasons are given by historians. For example, we are told that the Spanish Government neglected to carry out its promise of furnishing transport and food and of shelter ; that the French supply system was unsuitable ; that the route, though the shortest, was impracticable ; and lastly, that Napoleon himself was to blame in issuing detailed instructions from a distance for an operation without knowing the local conditions which affected it. In all this there is a modicum of truth. But a careful examination of what is known will show that these adverse factors could, and no doubt would, have been wholly, or partly removed, had Junot possessed an efficient Intelligence Service.

Let us examine the facts. Junot's force started from France on the 17th of October, 1807, as an army corps of 26,500 men, 3,270 horses, 38 guns and 211 ammunition wagons. As a support to this corps, Spain had agreed to furnish 8,000 infantry and 3,000 sabres, in addition to some 16,000 auxiliaries who were to invade Portugal independently. The French were admirably organized and well trained, and to impress the inhabitants with the high standard of discipline and good conduct of the French Army, Junot appealed to his troops in a general order to refrain from exactions or excesses during their march through Spain. As the Spanish Government had engaged to provide billets, transport and supplies, no arrangements were made for supply columns and parks, though transport was available for the purpose. The route as far as Salamanca was divided into stages, and the exact requirements of the troops at each stage were made known to the Spanish Intendant General, who was

attached to French headquarters to act as a liaison officer and to work out details of supply. With his help each *commune* in which troops were to be billeted and subsisted was warned well in advance what quarters and rations were required. Lastly, French administrative officials were appointed to regulate receipts and issues of foodstuffs and forage, and on the day before the Army left France a staff officer, a *commissaire de guerre*, and a senior medical officer were sent on ahead to supervise the general conduct of these services.

In spite of all these elaborate arrangements, difficulties arose almost from the start. The people flocked from the villages to the towns to see the troops ; there were public receptions by the civic and ecclesiastical authorities ; but it soon became only too evident that the inhabitants came to look not to welcome, and that the authorities were prepared to organize public receptions and not to exert themselves to furnish quarters and rations. The billets were filthy and verminous, so that the men frequently preferred to lie in the streets exposed to the weather. The foodstuffs and forage furnished were insufficient in quantity and almost inedible. Only at two places, Tolosa and Vittoria, were requirements met in full, although the excellent reception given to the French at the latter place was somewhat discounted by the assassination of two soldiers. From the beginning all the efforts to gain the goodwill of the inhabitants failed. It frequently happened, in spite of the exemplary behaviour of the troops, that soldiers who had been separated from their columns were attacked, ill-treated and even murdered. Thiebault in his *Relation de l'expédition du Portugal* quotes this example of the bad faith of the Spaniards, of which he complains bitterly. Just before the arrival of the columns at the town of Duegnas a serious fire had broken out there. No attempt to extinguish it was made by the inhabitants, who merely assembled in the streets and prayed to God to help them. On arrival the French troops, disregarding danger, set themselves to the work of rescue and after seven hours' strenuous effort succeeded in saving the town. The citizens at once expressed their gratitude to the General, but next morning murdered an inoffensive French soldier who had stayed in the town when the column marched out. To what extent the Spaniards were really to blame for their exhibition of ill-feeling it is difficult to determine. Not unnaturally they did not want the French, or any other foreign troops, in their country. It has been stated that the conduct of the troops was exemplary, at any rate during the early stages of their advance, and that everything was done by them to conciliate the natives. But, of course, it is difficult to

believe that they gave absolutely no cause for offence, for among so many there must have been some men whose character was not entirely blameless. There may have been, and probably were, misunderstandings in regard to their attitude towards women. A story is related which illustrates what happened at any rate on one occasion. A French officer courted a woman at an inn. This led to a disturbance with the husband of the lady and the punishment of the officer. But the effect would perhaps have been better had the General in command refrained from explaining that he had inflicted a heavy punishment not only because the officer had imperilled the good relations between the French and the natives, but because his conduct was unbecoming the character of an officer in that he had failed to press to a successful conclusion a courtship which he had forced upon a woman in public, and had permitted a foreigner (i.e. the husband) to take her from him. He added that it was deplorable to have to admit that the woman had preferred her own husband to a French officer.

From all the above it will be seen that the campaign did not open auspiciously. There was both passive resistance and open hostility. Owing to the lack of shelter and food—which the Spanish Government had promised to provide—the troops were soon placed on short rations, and suffered much from unnecessary exposure. Nevertheless, their general conduct continued to be satisfactory and they reached Salamanca in reasonably good order. By that time Junot had made more satisfactory arrangements with the Spanish authorities, and he looked forward to resting his Army there in comfortable quarters with adequate subsistence. He was doomed to disappointment, for he received a peremptory order from Napoleon to continue his march to Lisbon. It was vital that he should reach Portugal at the earliest possible moment, and the Emperor, as if foreseeing Junot's difficulties, made it quite clear that he would accept no excuse for delay, not even that of lack of supplies.

"On no account," said Napoleon, "halt in your march even for one day. The want of provisions could be no reason for doing so, still less the state of the roads. Twenty thousand men can march and live anywhere, even in a desert."

The last sentence, by the bye, was, of course, not intended to be taken literally. Extracted from the context it is nonsense; and should not be quoted as one of Napoleon's "maxims." He merely wished to stifle at birth any idea which Junot might have had of halting to collect supplies. In other words, he intended to express

in the most forcible way possible that arrangements for feeding 20,000 men could be improvised anywhere in Spain. Junot understood perfectly what the Emperor meant. His orders were clear. He was to march to Alcantara, to concentrate his divisions and then, to advance on Lisbon *via* Abrantes. The route selected was shorter than any other and passed through several small towns where he could, as he thought, count upon finding ample means to meet his requirements. In this he was utterly mistaken. This route passed over mountainous country by roads and tracks which heavy rain had rendered quite impracticable for wheeled transport and nearly so for infantry. The few maps available were so inaccurate that they were almost useless for their purpose ; and the guides obtainable proved equally unreliable. We are told that the Portuguese, themselves, knew less about the topography of these districts than they did of that of Brazil or the Indies. What chance then was there that the Spaniards would be better informed ? The guides continually lost their way, with the result that the columns led by them had to retrace their steps and to start again on a day's march at a time when they should have reached their destination. Rain and snow storms followed one another incessantly and the cold was intense. Yet it was seldom that the troops obtained shelter at the end of a day's march. The supply service broke down completely. As far as Salamanca the troops had received rations of a sort, bad undoubtedly and in small quantities, but sufficient to keep body and soul together. Now the situation became infinitely worse. During the march from Salamanca to Ciudad Rodrigo, which took two days, the only food issued consisted of a handful of acorns per man. At Ciudad Rodrigo the men received about half a normal ration. After that there was no regular issue until Alcantara was reached three days later. The troops naturally tried to forage for themselves, but found nothing ; the villagers, equally naturally, fled on the approach of the columns, taking their movable property with them. Moreover, they were now openly hostile and ill-treated or murdered any stragglers who fell into their hands.

At Alcantara Junot had counted upon finding ample supplies of everything. The boots, clothing and equipment of the men were badly in need of repair or replacement. The cartridges had become unserviceable as a result of the rain. All he was able to collect, however, was half a bread ration, an ox and two goats per battalion, and some powder and lead for his ammunition. He had no paper for the manufacture of cartridges, so he overcame the difficulty by using the archives of the Knights of Alcantara. The situation was

now desperate. He could not remain at Alcantara without food. To return to Salamanca meant the total failure of his mission. To continue his advance to Abrantes, the next big town, implied a six days' march over inhospitable mountains, under conditions worse than those already experienced, and, at any moment, he might expect to meet a stronger and better equipped Portuguese Army.

He selected this third alternative and at once continued his march. It is not possible within the limits of this article to describe all the further hardships endured. One example will perhaps suffice. Sobreira was reached by the head of the column at midnight after a very fatiguing march in a deluge of rain. Into this village the men limped at intervals all through the night. There was no shelter, and, as they were up to the knees in mud, they could neither lie nor sit down. There was no question of drawing rations. There were no supplies. A few chestnuts had, however, been discovered which had to be eaten raw. In these circumstances the soldiers foraged for themselves, and their discipline, which had already deteriorated long before this, now broke down entirely. They left the column in search of villages and homesteads which they plundered ruthlessly. With the exception of one or two detachments the Army became rapidly disorganized. Not until they reached Abrantes after five days of wandering in the mountains could the troops, for the first time, be victualled and re-equipped. Here there was a halt for several days in the hope of a sufficient number of men being collected to make a dignified entry into Lisbon. But it was too late. Junot had lost nearly the whole of his Army, but he gallantly led the remnants, incapable though they were of fighting or even of firing a shot, to Lisbon and the conquest of Portugal.

Nothing succeeds like success. And the success of Junot's enterprise made up for the temporary loss of his Army. Had it been otherwise, had the Portuguese put up even the faintest opposition, which must have caused the failure of the French operation, we should have heard much more about the mistakes made by the French in the conduct of this campaign, and they would have attracted more attention from students of military history. The chief errors committed have been pointed out. But any criticisms require qualification. We can dispose at once of that of Napoleon. If the Emperor made any mistake, it was in thinking that Junot would be able to ensure that his troops should reach Portugal in fighting condition. His policy required that an army should reach Lisbon in the shortest possible time, and it was for its commander and staff to devise means to achieve this end. The fact that in his

orders he expressly specified that bad roads and lack of supplies would not be accepted as an excuse for delay, shows that he appreciated the difficulties.

Junot, unfortunately, did not rise to the occasion. He could no doubt have organized an efficient supply service on the basis of the normal French system. Reference has been made in a previous article * to the difficulties of meeting from local resources the requirements of a force which is constantly on the move, and to the necessity for such a force to be accompanied by mobile reserves even in a rich and fertile country. Junot must have been well aware of these points ; he had plenty of experience, and yet he began his advance, contrary to the normal French practice, without any mobile reserves whatever. The explanation, no doubt, is that he relied on the promises of the Spanish. Moreover, having found great difficulty in finding forage for his cavalry, even before he began to move forward, he naturally would not desire to encumber his force with unnecessary transport animals. Junot, in fact, proceeded as he thought under peace conditions, with all arrangements for the maintenance of his troops worked out beforehand to the last ounce. These arrangements broke down completely, as we have seen. The question is, " Who was to blame ? "

The usual answer is the Spanish authorities, who had promised to supply everything required, excepting the pay, and had failed to carry out their promise. We may agree that the Spanish were to blame, but not to such an extent as generally thought. Napier and other eminent historians suggest that they acted throughout in bad faith and deliberately neglected to carry out their promises. A reference to Oman's more recent history of the campaigns in the Peninsula show that this is not true. The Spanish authorities did in fact attempt to collect the promised foodstuffs and forage alongside the line of march, but they had no organization with which to do it ; and the local authorities did not know how to carry out the orders given to them. They could call on merchants or farmers to provide what was necessary, but they had no means of enforcing their demands. Without ready cash, which was not at all likely to be in their hands, what inducement could they offer to the holders of stocks to surrender their goods ? And, even if the holders were willing to supply, there was no machinery for collection or for storage. The local authorities could neither be inspired nor coerced to improvise any such organization, and contented themselves with protests that they could do no more than they had done.

* See *Army Quarterly*, January, 1928.

On the few occasions when a sufficient quantity of food had been collected, it was deposited in large dumps in the open, or in cellars, where it rotted before the French could use it.

It has not been possible to discover why Junot did not foresee all this. He had been in consultation with the Spanish authorities on the subject for some considerable time before he moved forward, and one or two leading questions to the Spanish Intendant, General Besarco de Guardaqui (Foy calls him Cesarco Gardoqui), as to how they proposed to carry out their part of the bargain might have disclosed the actual state of affairs. The probability is that he did put these questions. It is also probable that he received reassuring answers. But it is difficult to understand how he could be misled, as he obviously was. It must have been well known that the Spanish Army was not in the habit of receiving its rations from its commissariat officials; that the normal system was to call upon contractors and local authorities to supply what was required, and that the normal result was that the requirements were never met in full. It was—to say the least—unlikely that what the commissariat officials were incapable of doing for their own troops they would be able to do for the French. And, if Junot was aware of this, why did he not send his own commissariat officials to supervise the work of collecting supplies? The inference is that he did not know it. The question then arises as to why he was so ignorant of conditions in Spain. And it is not only in the matter of the Spanish commissariat and other local authorities that Junot was badly informed, he was equally ignorant of the topography of the country he was to traverse. From the very beginning, before he left France, he knew that not less than 6,000 of his troops would be sent to Ciudad Rodrigo and in front of that place (Thiebault), and, after leaving Valladolid, he knew that he would be required to march to Lisbon *via* Alcantara, where he was to be joined by a strong Spanish corps. Yet he appears to have been taken completely by surprise when he reached Alcantara and discovered that not only were there no supplies for him, but that there were no roads worthy the name available for the continuation of the march. We are forced to the conclusion either that Junot neglected to order a reconnaissance of the country which he was to traverse, or that the French Intelligence Service was defective.

Napoleon, himself, was apparently also badly informed on these points. But he had drawn his subordinate's attention to them and had directed him to send in reports and maps of the country. In regard to the failure of the Spanish commissariat arrangements, Wellington—who was not apt to be careless in his administrative

arrangements—had precisely the same experience in his Talavera campaign. The conclusion is that in the Peninsula conditions under which active operations had to be carried out must have been very exceptional. But it is none the less plain that the resulting difficulties would have been greatly diminished had commanders been better informed about these conditions. In the example under discussion, it would have been a comparatively easy matter to load some of the transport wagons actually available with a reserve of supplies which would have enabled the French Army to reach Salamanca in good condition. At that place food was plentiful, and could have been collected in time if proper measures had been taken beforehand. For the onward march, even if pack mules could not have been obtained, the men themselves could have carried enough to see them through to Alcantara and Abrantes. In the 1812 campaign in Russia Davoust's troops carried four days' bread and biscuit, seven days' flour, two spare boots, and sixty rounds ammunition besides the rest of their equipment. It is not suggested that Junot's conscripts would have been able to carry as much as this under the prevailing weather conditions, but they certainly could have carried sufficient to last them as far as Ciudad Rodrigo and from there to Alcantara, where we know, from subsequent events, that further supplies could have been made available had Junot's staff arrived a day earlier than it did. But Junot apparently did not realize until he had actually commenced the march that some such measures would have to be taken. It was then too late.

In the armies of the present day the necessity for having accurate information of the conditions in a country in which operations are to be conducted is fully appreciated, and a good Intelligence Service succeeds in collecting it. Yet it is not always possible to ensure that the facts reach those who most require them. The custom is to record them in handbooks, pamphlets, etc., which are circulated to commanders and their staffs. But an officer who has to concentrate all his energy on the performance of the duties allotted to him, cannot wade through many books and masses of written reports on the mere chance of discovering something that may help him in his work. Whatever his professional zeal, he would not ordinarily have time to do this. In other words, those officers and officials, who are responsible for what in our "Field Service Regulations" is termed the service of "provision and production," are compelled to delegate to others, conversant with their requirements and specially trained for the duty, this task of examining and coordinating the statistical and other information so necessary to its efficient performance.

Incidentally, it may be remarked that the service of "provision and production" is not an accurate science which can be mastered in time of peace, though a study of examples, such as the foregoing, may go some way in illustrating pitfalls to be avoided. It is a science which has to be acquired by practice. It is more than a matter of merely drawing up lists of what an army needs and of placing orders with contractors and others. An army whose providers base their calculations on such action alone will surely want, for there are innumerable factors which tend to upset such calculations and transactions, as a shortage of raw materials, a breakdown of contracts and transport, the loss and deterioration of supplies, etc., and which have to be correctly appreciated and allowed for if an adequate supply is to be assured. Without a good Intelligence Service which knows how to disseminate the fruits of its work to those who are concerned, some of these factors are sure to be overlooked. Even great commanders like Napoleon and Wellington have failed in this direction for want of better information, but they never made the same mistake twice.

FOUR BROTHERS IN THE GREAT WAR

ROLAND BOYS BRADFORD, V.C., was killed before Cambrai on the 30th of November, 1917, at the age of twenty-five, the youngest general officer in the British Army. It is not generally known that he was one of four brothers of whom all served their country well and three died in doing so. In memory of the three who gave their lives, "and to all those who went out to fight in the Great War and did not return," there has been printed, for private circulation only, a little book which it is a great privilege to read.*

The Bradfords come of good Border stock, although the mother of these fine sons is of Kentish family, and the glimpse afforded of their early life shows what the boys owed to the influence of the best type of English home. All were of sterling character, athletes and sportsmen, and possessed of more than common ability.

Captain T. A. Bradford, D.S.O., the eldest of the brothers, is the only one who now survives. Although not a professional soldier he was always a keen Volunteer and Territorial, and went out to France as a captain in the 8th Durham Light Infantry. Wounded at the battle of Ypres, 1915, mentioned in despatches and honoured with the Distinguished Service Order, he held several staff appointments and, later, received a Commission as a Regular in the York and Lancaster Regiment.

Lieutenant J. B. Bradford was a trooper in the Northumberland Hussars at the beginning of the war, and it was not until 1915 that he accepted a Commission, yielding to the persuasions of his brother Roland, who told him that he "would be of more value as an officer." Serving as a subaltern in the 18th Durham Light Infantry, he was severely wounded in August, 1916, but returned to France early in the following year. For his gallant leadership in action in the Hebuterne sector he won the Military Cross. He was mortally wounded on the 10th of May, 1917, the first of the Bradford brothers to go.

Even before the war the career of Lieut.-Commander G. N.

* See "Brigadier-General R. B. Bradford, V.C., M.C., and his Brothers." Printed by Eden Fisher & Co., Ltd., London.

Bradford, R.N., seemed to mark him out for high distinction in the Service, although he did not appear to be ambitious or over-keen on promotion. He was specially selected to command the *Iris* storming party at the famous attack upon the Zeebrugge base, St. George's Day, 1918. Here his gallantry cost him his life and earned him the posthumous award of the Victoria Cross. The derrick of the *Iris* had attached to it a parapet anchor with which to make the vessel fast to the mole, so that the landing party could place the ladders in position and scramble ashore. But the pitching and rolling of the vessel sent the derrick crashing repeatedly against the mole, and the plan seemed impossible to carry out. It was no part of his duty, but George Bradford climbed the derrick, and, watching for the favourable moment, jumped for the mole, carrying the anchor with him. He made the anchor fast, but almost at once he was riddled with machine-gun bullets and fell into the sea.

There can be no more fitting tribute to this hero than Admiral Jellicoe's words to Mrs. Bradford :

"The Service and the Country have indeed lost in him one who could ill be spared. He died, as one would have expected him to die, under the circumstances of the greatest gallantry and with supreme self-sacrifice. From one who is very proud to have had so gallant an officer and so perfect a gentleman under his command."

One is enabled to trace in more detail the career of the youngest of the brothers, the one who attained the highest rank, Roland Boys Bradford. Though an all-round athlete, he was otherwise undistinguished at school, and soon after leaving he was much attracted by the prospect of becoming a doctor. But a little later he began to gain experience as a Territorial, and a month's attachment to a Regular battalion—the 2nd Durham Light Infantry—decided him in the choice of a career. He passed in through the Special Reserve and was gazetted as second-lieutenant to the same battalion in May, 1912, at the age of twenty. It is not claimed that Roland Bradford, as a subaltern, displayed transcendent ability. But he was keen and enthusiastic, kept himself fit, was prominent at games, began to hunt, and displayed a genuine interest in the welfare of his men. He was tolerably well read although he "did not burn the midnight oil poring over Hamley and Clausewitz, nor did he indulge in prophetic statements regarding the military art which have been fulfilled to the letter in this war."

When war came he was twenty-two, fit in mind and body, and quietly confident of playing his part well. He realized that it would

probably be a long and arduous struggle, and naturally his thoughts turned to quick promotion and distinction. Later, the cause became almost everything to him and personal ambition of little account.

He gained his first step soon after his battalion—it was in the 6th Division—arrived in France. On the Aisne and in Flanders he led his platoon with conspicuous ability, and early in the new year was awarded the Military Cross and received a “mention.” In May, 1915, he went as adjutant to the 7th D.L.I., which was soon made a pioneer battalion. If it was devoid of striking incident this appointment, which lasted nearly a year, brought him much valuable experience.

As second-in-command and temporary major Roland joined the 9th D.L.I. in April, 1916, and when the battalion moved to the Somme area he was in command of it. Before leading it in battle, during three weeks’ training behind the line, he began to mould the 9th after his own fashion. The result was seen in the battle of Flers-Courcelette, when the new colonel led his men well, although he had been wounded.

It is now time to speak of his genius for leadership and his fearlessly applied tactical knowledge which won for him and for the 9th D.L.I. so great a reputation. His rare enthusiasm made him see something more in the war than the “dirty ungentlemanly business,” which it appeared to so many of fine susceptibilities. His simple unaffected piety—every night, wherever they were, he got his men to sing a verse of “Abide with me”—and genuine interest in the welfare of all ranks, which was demonstrated in a hundred practical ways, won him the respect, confidence and affection of his officers and men. He had a fine sense of discipline and brooked no slackness; but as a battalion commander, and later as a brigadier, he carried the handicap of his youth with complete success. “His manner of dealing with older men, who were soldiers when he was in the schoolroom, was charming.”

Above all he studied his profession and was ever seeking solutions to the tactical problems which arose. He knew how to train his battalion: if he worked his men hard, he worked himself harder, and proved in action that he was justified of his methods. His physical fitness stood him in good stead. Calm under fire, his Victoria Cross was won, not by the spectacular deed of a few minutes, but by his control of a critical situation during a big attack, so that his skilful handling of another battalion beside his own converted failure into success. Perhaps the finest memorial to Roland as a

soldier is to be found in the record of the 9th D.L.I. while it was under his command.

He was appointed to command the 186th Brigade of the 62nd Division early in November, 1917. On the previous day he had been wounded for the third time, but remained at duty. His battalion was holding a line of water-logged shell holes north-east of Ypres, and he insisted upon remaining with it until it was relieved, as his successor had not yet appeared.

He was only destined to lead his brigade in two general actions before his early death, but the fighting at Bourlon during the Cambrai battle showed him as more than equal to his higher responsibilities.

"After this attack his men would have followed him anywhere, for now they had seen with their own eyes that his reputation as a fine soldier and fearless man was based on grounds that were absolutely sound and true."

On the morning of the 30th of November, 1917, Roland Bradford was killed. Unaccompanied he left his headquarters' dug-out during a heavy bombardment, and his body was found later in the day: he had been hit by a shell splinter and must have died instantly. His divisional commander called him "a soldier of real genius." Earl Haig wrote:

"He was an officer of outstanding talent and personality; as a Battalion and Brigade Commander exceptionally young but particularly capable. His death was a great loss to the Army, and I and all who had known or served with him deeply deplored it."

Roland Bradford was buried at the British cemetery at Hermies, near Havrincourt. At Darlington the public memorial to the Bradford brothers has taken the form of a large donation to a new hospital, the entrance of which will be called "The Bradford Entrance." One can understand with what loving pride was prepared this printed memorial for circulation amongst relatives and friends. But George Nicholson Bradford, James Barker Bradford and Roland Boys Bradford, numbered in the great company of the honoured dead, are our common possession. Britain has no treasure so great as the families which send forth such splendid young men as these.

A TRIBUTE TO THE MEMORY OF COLONEL G. F. R. HENDERSON

BY ALEXANDER SMIRNOFF

TWENTY-FIVE years ago Colonel G. F. R. Henderson, best known to the world as the brilliant author of "Stonewall Jackson," passed away at Assouan, at the comparatively early age of fifty-two. Since then a quarter of a century has rolled by, and it is easier now to assign to the late Colonel his rightful place among other illustrious writers than was possible directly after his decease.

The question naturally arises whether Colonel Henderson's writings still possess intrinsic and practical value to military students, or whether their interest is merely historical, their greatest attraction lying in the inimitable style which ranks with that of the masters of English prose. The present writer, who has been a close student of all Colonel Henderson's work since he first read "Stonewall Jackson," some twenty years ago, proposes in this article to answer this question in the light of the lessons learnt in the Russo-Japanese and World Wars, and by comparing them with the work of other military writers of European repute, by which method alone it seems possible to estimate rightly Colonel Henderson's outstanding merit. His task has been a pleasant one, for it is impossible when analysing Colonel Henderson's writings not to be influenced by the author's striking personality and by the individuality of his literary style, which is the hall-mark of true genius.

Colonel Henderson was born in June, 1852, and obtained a Commission in the York and Lancaster Regiment in 1878. He served with the 2nd Battalion of his Regiment in the Egyptian Campaign of 1882 and was present at El Magpan, Val el Mahuta, Kassasin and Tel-el-Kebir. In the following year he went with his Regiment to Bermuda and Halifax, where he remained for two years. During this period he visited the battlefields of Virginia, and first conceived the idea of writing about the War of Secession. Returning home in 1885, he was appointed a Deputy Assistant Commissary-General of the Ordnance Department, and his first

station was at Fort George in the county of Inverness. Now, for the first time in his military career, he had time for writing, and he produced his first book, "Fredericksburg," a tactical study, written anonymously, a work which was favourably received by the Press and by military students. It attracted the attention of Lord Wolseley, who ascertained the author's name and became interested in his future. His next work, "Spicheren," dealt with an early battle of the Franco-German War of 1870, and was especially intended for volunteer officers. This study also received great praise, and encouraged the young author to devote himself to a more serious subject which was to occupy him for many years to come, being no other than the now famous "Stonewall Jackson."

In 1889 Colonel Henderson, to his great joy, was appointed to be Instructor of Tactics at Sandhurst. He had desired such a post for a long time, and he now threw himself heart and soul into his work. Three years later he became Professor of Military Art and History at the Staff College—a post which he filled until he went out to South Africa in December, 1899. His period at the Staff College was the most fruitful of his life. His prestige at the College was high, and his popularity was enhanced by the fact that he invariably interested himself in the papers presented to him by the students, which he would correct with his own hand, never forgetting to bestow praise when it was deserved. Outside the walls of the College, however, his reputation as a military writer, although already acknowledged by soldiers, was not generally acknowledged until the appearance of "Stonewall Jackson," aptly called at the time of its publication (early in 1899) by the late Sir Henry Bracken-burg, "a wonderful threefold combination, of a biography, a military history and an essay on the art of War," brought him instant recognition. In this work the author gave to the world a part of himself. As an actor cannot play his rôle without investing it with his personality, so an author is bound to a certain extent to approach his subject from his own standpoint. Jackson, in Colonel Henderson's hands, is a living personality, the upright, God-fearing man, whose example can still inspire others to follow in his footsteps; the keen student of human nature, who had the rare gift of divining his enemy's intentions; the man of tenacious purpose, who had a magnetic hold over his men; the loyal subordinate of Lee. Colonel Henderson's book was a revelation to all students of war, and, had it been studied with greater diligence, many of the mistakes committed in the South African War, and even in the Great War, might well have been avoided.

Lord Roberts was so much impressed by Colonel Henderson's description of Jackson's rapid movements, which invariably took the Federals by surprise, that, on assuming command of the British forces in South Africa, he determined to emulate the American General's example by marching straight on the capitals of the Orange Free State and the Transvaal. Leaving England at the end of December, 1899, he took Colonel Henderson with him as his Director of Intelligence, a post in which he showed great ability. It is an open secret that the Colonel was largely responsible for the military operations which ended at Paardeburg, and one cannot but be struck by the parallel between them and those depicted in his "Stonewall Jackson." He was in the closest confidence of his Chief, and his knowledge of Lee's campaigns were of great advantage even to so experienced a soldier as Lord Roberts. But his stay at the front was of the briefest, for having been taken ill after the advance from the Modder River he was invalided home. It was not until the following August that he was able to resume work, when he was commissioned to write the Official history of the South African War. For this purpose he journeyed to the Cape at the end of 1901, spending there several months to gain first-hand information. He also found time to revise the Drill Book, the tactical side of which was very largely written by him. He was at this time contemplating writing the life of General Robert E. Lee,* for which he was especially qualified. It is sometimes thought that Colonel Henderson overrated the abilities of Jackson at the expense of Lee, and that he endeavoured to minimize the Confederate leader's genius in order to bestow greater praise on his hero. This view, in the opinion of the present writer, is quite unfounded, for Colonel Henderson in a lecture at the United Service Institution in 1894 explained to his audience that among American generals "the greatest of all was Lee."† Towards the end of 1902 Colonel Henderson's health began to give way, and he was ordered to Egypt, where he continued writing practically to the last. He passed away at Assouan in March, 1903, and his death has left a blank which has never been completely filled. Let us see what constitutes Colonel Henderson's greatest merit, and why his works have in no way lost their value even after the experience of the World War, but continue to rank as highly as ever.

In studying the work even of those military writers who are justly

* Military students had to wait twenty-two years before Major-General Sir Frederick Maurice gave to the world (1925) his brilliant study of "Lee, the General."

† See Henderson's "Science of War," p. 177.

recognized as the élite of their profession, one cannot but remark that the majority of them have become slaves of their own pet theories, thereby overlooking the simple fact that war is a contest of human beings and that the combatants are invariably swayed by human emotions. "Scharnhorst long since bewailed the fact that the psychological side of the science of warfare is so little known. Modern military history even more than the old breaks away from a discussion of the psychological element." * It is for this reason principally that so many leaders in war have failed so miserably, for they have never studied as they should have done the human element in war.

Every great captain the world over, nay, every great leader of a nation, has been above all a keen psychologist, who has known how to foster the enthusiasm of his men and has been able to read the enemy's intentions like an open book. Alas, no such leader arose in the Great War, and we are inclined now to place our trust in men reared in a narrow groove, who have made a fetish of this or that theory, or place their trust in machinery rather than in men.† Let no one imagine for an instant that the present writer wishes to decry new inventions; on the contrary, he is willing to admit that mechanization has come to stay, and that it will be most useful in the future; but woe to the nation which entrusts its destiny to one-sided specialists, who neglect in their enthusiasm the glaring lessons of the past.

General Camon, the well-known French writer on Napoleon, for example, apparently wishes us to believe that the Emperor was the originator of attacking the enemy's rear. He evidently has overlooked the fact that this manœuvre has been practised by great commanders throughout history. For an example of it one need only allude to Count Egmont's brilliant attack on the French at St. Quentin in 1557, and Tchingiz Chan also frequently adapted this manœuvre, which even in his day was no novelty.

Count Alfred Schlieffen, Chief of the German General Staff from 1891 to 1906, is another example of a military writer whose one-sided idea absolutely dominated his whole military outlook. He could not conceive waging war except by planning a double envelopment *à la* Hannibal, and, in analysing the campaigns of Napoleon and Moltke, he invariably criticized those great leaders if they failed to follow his pet idea.

* See Von der Goltz, "Nation in Arms."

† Even General Camon has lately become obsessed with the supreme importance of mechanization.

Bonnal and Foch, too, are not entirely exempt from this habit of taking a one-sided view in their military criticisms. In their enthusiasm for the "Advance Guard" theory, which they consider as the essence of Napoleon's doctrine of war, they have applied it as a criterion when studying the campaigns of other captains. Again, if one turns to Lewal, whose valuable works are a mine of military erudition, one finds that the influence of moral factors, which play such an important part in the science of war, is barely mentioned. In this respect Hamley erred * even to a far greater extent, and, as a result, students reared on his ideas are prevented from gaining a sound outlook on the art of war. Colonel Henderson, although he admitted the value of Hamley's teaching, pointed out its limitations. It was

"an aid to study not to practice. In the description of Campaigns the keynote, that is, the aim of the commander seems often wanting. . . . Thus the student has read a great deal about rectangular bases, re-entering frontiers, parallel and transverse obstacles, but he had heard little of great principles; and if he is set to solve a strategical problem he finds that he has no clear idea of what to do or how to do it. . . . Again Hamley deliberately omitted all reference to the spirit of war, to moral influences." †

It is clear that any one brought up on such theories is bound to be influenced by them, and certainly not to his advantage. One can only regret, therefore, that this author is still so much in vogue. The Russian Military Academy, in the days before the Great War, where the writings of General Leer were the text-books for two generations, turned out students reared on geometrical principles akin to those of Hamley. The defeats in Manchuria and East Prussia may be mainly ascribed to such teachings, which found their greatest exponent in Jomini, the actual reorganizer of the above institution in Russia in the reign of Nicolas I. Colonel Henderson himself, who was educated on Hamley, was not able to free himself absolutely from his influence or from that of those writers who were inspired by Jomini tendencies. This is clearly evident when he uses the term "Grand Tactics" which General Lewal superseded by the far better title of "Strategy of Battle." Lewal draws his readers' attention to the fact that the "Grand Tactics" of which Napoleon spoke, and upon which Jomini enlarged in his writings, in view of the increase in the size of armies, deserves a new title.‡ It

* Professor Spenser Wilkinson was the first author who drew attention to Hamley's limitations in 1891. See "War and Policy," p. 153.

† See Henderson's "Strategy and its Teaching": a lecture. *Journal of the Royal United Service Institution*, July, 1898.

‡ See Lewal's *Strategie de Combat*, pp. 21 and 22.

is needless to say that Lewal meant everything to culminate in the concentration of superior forces at the decisive point. Most of his works were written in the nineties. As one finds no allusion to Lewal in any of Colonel Henderson's works or articles—although he must have known of this author by the quotations made in Colonel Home's "*Précis of Tactics*," a book which he often mentions—the present writer has come to the conclusion that Lewal must have escaped his notice.

Perhaps, if it is permissible to say so, Colonel Henderson paid less attention to the march strategy than many continental authors of repute of his time, such as the French writers, Foucart, Gilbert and Lewal * had given to the world. However, such oversight on his part does not enable one to disparage his contributions to the other no less important side of the military art. His outlook on the art of war, free from any pedantic teaching or preconceived theory, will make his name go down to posterity. No other writer's works are so useful as those of Colonel Henderson in demonstrating the moral influences in war. In this particular aspect of his subject no one has ever excelled him. At the same time, he was fully conscious that "the attainment of superiority of fire became the decisive factor, and the assault with the bayonet lost the importance which had hitherto belonged to it" † in battle.

In his deductions of military operations and facts he stands on a very high plane, and his "*Stonewall Jackson*" remains to this day the finest military biography in any language. Bonnal's "*Maréchal Ney*" and Derrecagaix's "*Maréchal Berthier*" cannot be compared with "*Stonewall Jackson*," which for its style alone is assured of a lasting place in English literature. Of all military writers most akin to him was General E. Martinoff, ‡ whose works unfortunately have not been translated into English.

The fact that Colonel Henderson never attempted to build up actual theories is incontestable, but he invariably drew his readers' attention to the principles of war as they were applied by the great military leaders. His practice was to call to his aid the lessons of military history, which confirm the students' deductions better than any abstract reasoning.

"Instructed in this way, the student when left to himself in the silence of his library, will become his own master, thereby strengthening his

* General Bonnal's works began to appear after Henderson's decease.

† See Henderson's "*The Battle of Wörth*," Introduction.

‡ General E. Martinoff was one of the best Russian authors whose individual writings were not sufficiently encouraged by the authorities.

soul by experience. . . . Little by little the doctrine will become conscious from subconscious and from theory it will transform into practice." *

Colonel Henderson's work, if studied in this manner, can be of inestimable value for the grounding of officers in their profession and for encouraging them to become acquainted with those authors who devoted themselves to analysing the higher branches of military science. Of Colonel Henderson it truly can be said, "that talent alone cannot make a writer. There must be a man behind the book, a personality which by birth and quality is pledged to the doctrines there set forth and which exists to see and state things so and not otherwise." †

* See General Cordonnier's *La Methode dans l'Etude de la Strategie*, p. 46.

† See Emerson's "Representative Men," p. 344.

WHY ARE NATIONS ARMED? WHY SHOULD THEY DISARM? WHY DO NOT THEY?

BY FESTINA LENTE

ONLY by a frank discussion of these three seemingly simple questions is it possible to arrive at a proper understanding of the much vexed problem of disarmament which is at present so exercising the minds of our statesmen. But frank discussion is not always so easy as one might wish. There are some who impatiently wave aside the whole conception of disarmament as impracticable idealism ; others who insist upon it as civilization's only hope. Finally, there are those who frankly do not interest themselves in the matter because they are blissfully ignorant (or perhaps all too conscious) of the vast issues involved.

The prominence, however, given to the subject in the international conversations which take place at Geneva and the attention which it is likely to attract at a future Parliamentary Election in this country can hardly fail to awaken our interest. We can no longer afford to be dogmatic—still less indifferent. We have to face facts, and an attempt is here made merely to set out some of the facts we have to face.

Why are nations armed?—In order to understand the instinct which has prompted nations to arm themselves, it is not perhaps inappropriate to inquire why all forms of animal life have been endowed by nature with weapons peculiar to each particular species. What use do animals make of the weapons nature provides? Offensively to get food ; defensively to protect their mate and their young. Do they use them for the sheer joy of using them ? Perhaps, but that is an acquired and not a natural taste. The lion roars, the dog growls, the cat swells its tail, but in most cases these demonstrations are resorted to not to provoke a conflict but to avert one. Animals are not naturally warlike. They are only so by force of circumstance.

Now man in his natural state is not at all well armed, except that he possesses that best of all weapons, a highly developed brain, and that brain has taught him to fashion for himself all kinds of

artificial weapons. Why ? For his amusement ? No—fundamentally for his own preservation. As man became more advanced he started to live in groups, and the physically strongest became defenders of the remainder of the tribe. Later the tribes grouped themselves into nations. Was there a warlike intention behind these developments ? No—the intention was essentially to promote peace and to enable men to go about without feeling that they were in constant danger. The effect, however, was not quite this. True, man was enabled to go about more freely, but only at a price—the price of periodical war. All through history the advance of civilization has proceeded side by side with war, the causes of which have been multifarious. There have been wars of personal ambition, national wars, racial wars, dynastic wars, religious wars and wars of revenge—yet all wars have one fundamental cause and it can be stated in one word. All wars are at bottom wars of survival.

Thus nations came to regard armaments as a necessary form of national insurance. The greater a nation's possessions the larger the premiums which had to be paid, though some of the smaller nations, fearful of their more powerful neighbours, paid proportionately more and armed themselves as expensively as nature arms the hedgehog. Nations insure against war much as individuals do against burglars or fire, and the risk of it in any given year is more than the risk of zero turning up at roulette.

Why should nations disarm ?—The cause of disarmament is based upon economic and humanitarian grounds.

Economically, armaments are clearly undesirable, provided the human brain can devise a cheaper method of insurance against war ; and the argument that cessation of expenditure on armaments would cause much unemployment and great depression in the steel and iron and other trades is comparable with the old-time arguments against the replacement of the handloom by machinery. Wholesale disarmament would undoubtedly cause serious dislocation, which we as a nation might feel acutely, but that is no argument in favour of retaining indefinitely a system which has merely been adopted in default of a better, provided that a better system can be found.

Again, from the humanitarian point of view the case for disarmament would appear self-evident. It is contended by some that the possession of power engenders a desire for its exercise and that military preparations, even if honestly commenced for defence and not defiance, inevitably end in war. Whether or not this is true, it is certainly a fact that armaments have never in the long run prevented war, but have tended merely to make it progressively

more terrible. It was a general recognition of the above facts that led to the First Hague Conference in 1899, and the following extract from the Note presented by the Russian Minister of Foreign Affairs to the diplomatic representatives of the different Powers suggesting that Conference is of considerable interest to-day.

“The ever increasing financial burdens strike at the root of public prosperity. The physical and intellectual forces of the people, labour and capital, are diverted for the greater part from their natural application and wasted unproductively. Hundreds of millions are spent in acquiring terrible engines of destruction which are regarded to-day as the latest inventions of science but are destined to-morrow to be rendered obsolete by some new discovery. National culture, economic progress and the production of wealth are either paralysed or developed in a wrong direction. Therefore the more the armaments of each Power increase the less they answer to the objects aimed at by the governments. Economic disturbances are caused in great measure by this system of excessive armaments, and the constant danger involved in this accumulation of war materials renders the armed peace of to-day a crushing burden more and more difficult for nations to bear. It consequently seems evident that if this situation be prolonged it will inevitably result in the very disaster it is sought to avoid and the thought of the horrors of which makes every humane mind shudder.”

It would seem, then, that though military unpreparedness may lead sooner or later to an unprepared nation being dictated to by a nation which has prepared, yet preparation and counter-preparation must sooner or later bring every nation either to financial ruin or else to war, which may prove the worse form of ruin of the two. Indeed, war does not seem to offer a satisfactory solution of any of the problems with which mankind is faced. Such problems are essentially economic problems—questions of population, production and trade—and a solution of them is only to be found in a high standard of industrial efficiency and commercial interdependence of which war is the very negation.

In these circumstances the civilized nations of to-day, supremely conscious of the horrors and evil effects of the last war and dismayed by the thought of the increased horrors and evil effects of the next, solemnly covenanted, as members of the League of Nations, to “recognize that the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety and the enforcement by common action of international obligations.” Moreover, the reduction of the armaments of Germany under the Treaty of Versailles was expressly undertaken “in order to render possible the initiation of a general limitation of the armaments of all nations.”

Why do not nations disarm?—Germany, a country which has disarmed under compulsion, has recently asked this very question, as indeed she might have been expected to do so soon as she became member of the League of Nations. And what is the answer? The answer surely is that nations do not yet trust one another. That is the blunt fact which we have to face. The animal instinct of self-preservation still survives in the instinct for national or racial preservation which has taken its place in the heart of man. No nation to-day would be prepared to submit a question to arbitration which it considered was vital to its continued existence as a nation. It would prefer to go down fighting, if that was its fate, rather than accept with philosophic calm an adverse decision which condemned it to death. Therefore, before a nation can be expected voluntarily to disarm it must be able not only to trust its neighbours to do the same, but to trust them to remain disarmed. Is such an experiment justified in the present state of civilization? This is the point which has to be considered, and it is not perhaps out of place to cast our minds back to the time when the experiment was last tried—namely, during the first two centuries of the Christian era when the civilized world under the hegemony of Rome was united into a single nation. During this period both naval and military disarmament were carried to great lengths and tried out under exceptionally favourable conditions. The legions became very much smaller both in number and in size and were made up increasingly of civilized or semi-civilized frontier tribesmen. They were called out only occasionally for drill or to repel a frontier raid, and became merely feeble militia. After the extinction of piracy, fleets ceased to be maintained in the Mediterranean and a profound calm reigned everywhere, only broken by a few frontier wars and a few civil disturbances. As between the nations of the civilized world there was peace for about two hundred years (30 B.C.—A.D. 167), and all national distinctions tended to become merged in the idea of a common Empire. It is difficult to determine cause and effect, and it is better to regard disarmament and peace during this period as mutually productive rather than to claim that one was the precursor of the other. The important thing is that both disarmament and peace were simultaneously achieved and St. Augustine was able to say: “*Conditæ est civitas Roma per quam Deo placuit orbem debellare terrarum et in unam Societatem rei publicæ legumque longe lateque pacare.*” * But what were the results? The first result was, in the words of Breasted, “Good government, fine buildings, education,

* See *De Civitate Dei*, xviii, 22.

and other evidences of civilization more widespread in the second century of peace than ever before." Or as Lord Balfour puts it :

"In few periods have the rich been readier to spend their private fortunes on public objects. There never was a community in which associations for every purpose of mutual aid or enjoyment sprang more readily into existence. There never was an age in which there was a more rapid advance in humanitarian ideals or a more anxious seeking after spiritual truth. Education was well endowed and its professors held in high esteem. Physical culture was cared for. Law was becoming scientific. Research was not forgotten. What more could be reasonably expected ?" *

The second result, however, was what Gibbon calls "a decline of genius." The age of peace and prosperity became an age of indolence and degeneracy. Trade and industry and the financial and business life of the cities languished. Agriculture, long stagnant, continued to decline. Divorce increased. Unemployment became rife. Although the general standard of education stood higher than it ever had, yet neither in science nor in art did a single man of great creative genius arise. Men were content merely to copy or to imitate the great works of the past, merely to learn what those who had gone before them had already discovered.

The final result was war, centuries of it, more widespread and more savage than any in which Rome had ever engaged while her Empire was in the making. The fierce uncivilized peoples from the North descended in hordes upon her defenceless frontiers and her very helplessness invited their attacks.

"The barbarians," writes Breasted, "penetrated far into Italy. In the West they over-ran Gaul and Spain and some of them crossed to Africa. In Gaul they burned city after city and their leaders stood by and laughed in exultation as they saw the flames devour the beautiful buildings of the Roman cities. . . . In the East the Goths, one of the strongest of the German tribes, took to the water and their fleet passed out of the Black Sea into the Mediterranean. While they devastated the coast cities far and wide, other bands pushed down through the Balkan peninsula and laid waste Greece as far as the Peloponnese. Even Athens was plundered." †

In the wake of these attacks followed periods of revolution, anarchy and lawlessness. Rome itself was thrice sacked, and, finally, the whole Empire tottered to pieces. Nor was that the end. Order having been reduced to chaos, there now devolved upon semi-civilized and ignorant peoples the task of slowly and painfully

* See "Sidgwick Memorial Lecture on Decadence," Cambridge, 1908.

† See Breasted, "Ancient Times," chap. xxix.

reconstructing what had been destroyed—of rebuilding civilization with nothing to guide them, until centuries later the Renaissance flooded the world with the forgotten learning of the past.

Two hundred years of peace had indeed been purchased at a heavy price. Rome gambled for Utopia with her hard-won civilization as the stake. She lost, and the world was plunged back again into the darkness from which it had commenced to emerge.

Mankind need not, however, be deterred from the pursuance of his ideals by the fate of the Roman Empire ; rather should he seek to profit by Rome's mistakes and to realize the truth of the Italian proverb, "*Chi va sano va piano, chi va piano va lontano.*" * To-day the uncivilized and semi-civilized peoples of the earth have yet to learn the folly of war, and it is the task of the civilized nations, which we hope have learnt it, to teach them. But can this be achieved by disarmament ? It is true that more can be taught by tact than by force and that there is no force like the force of example, but the education of uncivilized people is like the education of children. Tact and patience to begin with, but if Master Harold refuses to go to bed he has to be put there forcibly, and if, after mama has soothed his wounded feelings and explained as only she can why he must be a good boy and go to bed at the proper time in future, he still goes on night after night making a fuss about it, then he probably has to be spanked. Nor is force of any value unless it can be made effective, and this is so whether we actually use it or merely threaten to use it. It is useless to threaten a burglar with a revolver if he knows that it is not loaded, or to cane a boy if you do not hit hard enough to hurt him.

War may be damnable yet necessary in order to preserve the very civilization which condemns it. It is surely worth the sacrifice of countless lives if by that means alone the world avoids the sacrifice of its civilization, and that higher civilization to which it will assuredly lead if only the world will be patient. "*Nil sine magno vita labore dedit mortalibus*" is a true saying, and those who expect to achieve their ideals without centuries more of struggle and strife are indeed optimists, just as those who think them incapable of realization are the most tiresome pessimists.

The reason why an individual locks his doors and bolts his windows at night is because he dare not do otherwise. The reason why nations do not disarm is because they dare not. But let us not be discouraged. It was not so long ago that even in England a man travelled about with a pistol for fear of being waylaid by highway-

* "He who goes wisely goes slowly, he who goes slowly goes far."

men, and in the same way that this precaution has become unnecessary so we may hope that in the bigger business of national insurance against war it may gradually be found possible to introduce modifications into the size and nature of armaments. But let us be cautious.

"The savage nations of the globe," wrote Gibbon in 1787, "are the common enemies of civilized society, and we may inquire with anxious curiosity whether Europe is still threatened with a repetition of those calamities which formerly oppressed the arms and institutions of Rome." *

This brings us face to face with the most important problem of all. What is civilization? The Westerner has one idea of it; the Oriental has another; the Bolshevik Russian has a third. How can these three different conceptions of the same thing be reconciled? And what is to happen if they prove irreconcilable? Can they peacefully coexist? Let us be frank. What indisputable advantages has Western civilization over the others? It affords a higher general standard both of living and of education. It may have other advantages, but these at least are indisputable. How, then, are we to regard those who are content with lower standards than ours? Obviously as being in a lower state of civilization. How do they regard us? With envy! Who are in the minority? We are—vastly! Then let us indeed be very cautious.

* See "The Decline and Fall of the Roman Empire," chap. xxxviii.

THE INFANTRY ANTI-TANK WEAPON

BY COLONEL SIR HEREWARD WAKE, BT., C.M.G., D.S.O.

THE successes achieved by British tanks in the Great War were due to the fact that the hostile infantry had no means of fighting them. Rifle and machine-gun fire had no effect on them. Field guns, on the rare occasions when they were sufficiently far forward, usually failed to obtain direct hits. Ludendorff admitted that the necessity of an infantry anti-tank weapon was not realized till it was too late to produce one.

It is generally recognized that the first essential of an anti-tank weapon which is to meet infantry requirements is that it shall not be too cumbrous to accompany the infantry in the fore-front of the battle.

It is often asserted that the only answer to the tank is a tank ; in other words, that the anti-tank weapon must be mounted on an armoured vehicle. But this statement does not bear examination. Apart from the impossibility of producing enough tanks for the purpose, it is a fact admitted by officers who have fought in tanks that what the crew of a tank fears most is the anti-tank gun, which they cannot see and cannot locate even after it has opened fire. To mount this gun on a tank is therefore to deprive it of its greatest asset, the power of concealment.* An elephant-hunter does not climb on the back of another elephant.

Infantry require a weapon that is at least as inconspicuous, as easily moved and brought into action and fired, as the Vickers machine gun. It need not be a machine gun, as single shots are sufficient, and a water-cooling apparatus adds greatly to weight.

If such a weapon, capable of breaking tank armour at short ranges at a reasonable angle of impact, say 20 degrees, can be produced, infantry have nothing to fear from tanks and tanks cannot be used against infantry.

* If the gun is mounted on a small tank, it is useless for the purpose because small tanks can only follow infantry across very favourable ground. The mobility of a tank depends principally on the length of its track.

Can such a weapon be produced? Against any tanks we have at present there can only be one answer. The tanks we used in the war were better protected than our later models in which armour has been to some extent sacrificed to speed. It remains to be seen whether tanks can be built which are reasonably proof against an infantry anti-tank weapon. Armour and engines may be improved, but the weight and size of a tank must be strictly limited if it is to cross bridges, be transferred by rail, and not to become too large a target.*

In land warfare, the struggle between armour and weapon has one vital limiting condition applicable to both, i.e. neither the tank nor the anti-tank weapon must be too heavy or too big for the purpose which it is created to achieve.

Now let us consider the question of speed. Speed is of advantage to tanks in enabling them to move quickly across a shelled area, or to be transferred rapidly from one part of the battlefield to another. (We will omit the suggestion made by one enthusiast that speed will enable tanks to escape from the infantry they are attacking.)

Now if speed can make a tank a difficult target there may be justification for some sacrifice of armour in order to attain it. If the anti-tank weapon is a very heavy piece, like a 3-pr. gun, speed is obviously a great asset, as a fast-moving target is much more difficult to hit and no armour that a tank can carry will avail. But if it is the light weapon that infantry require, it is contended that no attainable speed will make the tank anything but an easy target. For besides the speed attainable, we must also consider the size of the target, the handiness of the anti-tank weapon, and the range at which the latter is fired.

What is the attainable speed? It may be asserted at once that no motor vehicle can travel over any surface than a metalled road at more than 20 miles an hour without jolting its machinery, and its crew as well, to a condition of incapacity. Normally it will have to proceed at a much slower pace. It must also be remembered that a tank only presents its best speed when moving straight across the front. The target presented by a tank is obviously a large one from the moment it comes into view.

The question of range is important because every yard added to the effective range of an anti-tank weapon increases the necessary

* Mr. V. W. Germain discusses the ballistic possibilities of small-bore weapons in "Armoured Warfare" in the July *Army Quarterly*. He considers that a small-bore weapon firing an armour-piercing bullet which can defeat any possible tank at short ranges will certainly be produced.

weight of the projectile and of the weapon itself. The infantry soldier's natural instinct is to demand a weapon of as great a range as possible, for he naturally prefers that hostile tanks shall be stopped before they reach him. This demand, however, carries with it disadvantages of weight and mobility, and means loss of rapidity of fire, which in the end defeat the object he has in view.

If the hostile tanks can be seen approaching at, say, 1,000 yards from the leading infantry, they can be engaged from that point by artillery. But the whole essence of a tank attack is surprise, and if it is a surprise, in the smoke and noise of battle (absent from peace manœuvres) nothing will prevent the hostile tanks reaching the leading infantry. It would be courting destruction by the bombardment to place the anti-tank weapon in the foremost line ; but it should be close behind it. This is an additional reason for not demanding a long effective range, for the attacking tanks cannot be engaged until they have practically passed through the leading infantry. In these circumstances a range of 400 yards would appear to be the extreme desideratum for certain destructive effect.

If experiments in shooting at moving tanks have been carried out, the results have not been published ; but it seems highly probable from the above that a tank in full view will provide an extremely easy target for any weapon which can be fired like a rifle or a Lewis gun from the shoulder, or like a machine gun from a tripod stand. The fact that the firer knows he will most probably not be seen from the tank, nor hit if he is seen, will not make his aim less certain.

The fact seems to be that we are still far more in the experimental stage as regards tanks than is generally admitted. It is quite within the bounds of possibility that an infantry anti-tank weapon may be produced which will make tanks useless as weapons of attack. Such weapons may be reproduced by the thousand, while tanks will always be very expensive and slow to turn out and there will be comparatively few at the beginning of a war. At any rate it is at present highly dangerous to claim that armoured fighting vehicles are to be masters of the future battlefield, or that victory cannot be won without them.

Mechanization is a term that has lately come to mean fighting mechanization chiefly, and to refer to tanks as used in the Great War. But if this line of development should fail, or partly fail, it is not the only one. The horse must inevitably continue to be replaced, as a method of transport in the field, by the motor vehicle in most theatres of operations. Armour need not be discarded

altogether because it does not afford complete protection. Soldiers wear steel hats, though they do not make them invulnerable. For example, armoured vehicles will be useful for transporting up to a certain point ammunition, reserves, wounded, etc., for they will give protection against shrapnel and splinters and to some extent against gas.

And in dealing with an enemy who has not all the resources of civilization at his disposal, i.e. in small wars so called, armoured fighting vehicles should for some time to come prove effective in suitable country.

THE SNOWBALL

BY "CAVERSFIELD"

Prologue

THE weather conditions on this afternoon in late March showed little sign of the advent of spring. A depressing atmosphere pervaded the room in the War Office occupied by the Balkan sub-section of the Directorate of Military Intelligence. The G.S.O.2, at his table near the fire, was reading the latest views on the Balkan situation as set forth in the current number of a well-known monthly review. The G.S.O.3, whose subordinate position banished him to the more frigid neighbourhood of the window, was occupied with the day's budget of press cuttings relevant to the South-Eastern European States. Pausing in his perusal of an article on the relative merits of Lombard Street and Wall Street as the field for a Balkan State loan, he leaned back in his chair, glanced at the rain-soaked prospect of the adjoining thoroughfare, and thus addressed his superior officer :

" I'm disappointed with the Balkans ; when I left the Staff College last Christmas, and was told I was coming here, I thought that as they have always been the cockpit of Europe there would certainly be plenty of interest and excitement, but we don't seem to get it."

The G.S.O.2 took his pipe from his mouth and laughed. " Have patience," he said. " Remember—in the spring the *comitadji's* fancy lightly turns to thoughts of crime ! The Balkans seldom disappoint at this time of year ; you ought soon to get your first opportunity of studying the annual epidemic of spring fever, it's a most interesting disease which seems to attack the peninsula regularly in March or April. In 1914 Europe went off the deep end because an Archduke was murdered in the Balkans ; now that the world has been made safe for democracy, we've got to readjust our scale of values, Archdukes are at a discount, and I think it's quite possible we might find ourselves any day in danger of taking a header

because some very humble individual had got a crack on the head in the neighbourhood of the Levant."

"But surely to goodness the Sarajevo murder wasn't the real cause of the war?"

"No, of course it was only the occasion, but, if an occasion presents itself, there is never any lack of a cause for a war in the Balkans; there are plenty of them now. One can't help agreeing with the eminent European statesman who is supposed to have said at the end of the Paris Conference that the peace treaties contained the germs of '*une guerre juste et durable*!' Damn the telephone. Hullo, yes, this is sub-section B.1 speaking."

I

While the above conversation was taking place Hadji Popicofski was wending his way homeward along a mountain path in the Balkans after attending a meeting of his local sub-committee of the Zhukomanian National Revolutionary Movement. The purpose of the Z.N.R.M. was, under the cloak of establishing the independence of a nebulous and undefined area called Zhukomania, generally to disturb the peace of the two contiguous countries of Neo-Cadonia and Rurakia which divided Zhukomania between them. Friend Hadji was in a very bad temper; he had gone to the committee meeting hoping to hear that the headquarters of the Z.N.R.M. had mapped out a full programme of raids from Rurakia into Neo-Cadonia in accordance with the usual spring practice. Instead of this it had been announced that there was to be no bellicose activity for the present because the expected subsidy from Moscow had not been forthcoming, the Third International having decided that the executive of the Z.N.R.M. was lacking in communistic ginger; and also because a consignment of rifles, expected from no one quite knew where, had likewise failed to materialize. Headquarters had therefore decided on a policy of *reculer pour mieux sauter* next year, but next year seemed a long way off to Hadji who knew of at least three men who had taken oaths to murder him as soon as possible. There was, however, a silver lining to the cloud; though official raiding was taboo there was nothing to prevent unofficial raiding, and a plan which should afford a pleasant night's amusement, and which could be put into instant execution, occurred to him.

He remembered that a little further on was a path which led over the ridge on his left into the valley of the river Rakovska which

formed the frontier between Rurakia and Neo-Cadonia. The river presented no obstacle to an active *comitadji*, and an hour's walk beyond it lay a small inn which was sometimes used as a rendezvous by members of the Z.N.R.M. when they had business to transact in Neo-Cadonia. Nedeja, the inn-keeper's daughter, was an old flame of Hadji's, and he felt that her smiles and caresses would go far to console him for his recent disappointment. To reach the frontier he would, of course, have to pass through the line of posts maintained by the Rurakian Frontier Guards, but this was of no importance since the men of that corps were either too sympathetic with, or too frightened of, the Z.N.R.M. to dream of interfering with a member of the local sub-committee whether proceeding on his lawful or unlawful occasions. The true sport of the enterprise would consist in stalking through the posts on the other side of the frontier, since the Neo-Cadonian Government had the sense to garrison their portion of Zhukomania with troops recruited from the opposite end of the kingdom, who feared not the Z.N.R.M.

A couple of hours later he reached the Neo-Cadonian bank of the Rakovska and paused to orientate himself. Quickly recognizing a clump of trees silhouetted against the skyline in the moonlight, he realized that he must be quite close to one of the frontier posts. Advancing cautiously he was surprised at seeing no signs of the sentry, until a sound of snoring reached his ears. A moment later he was standing over the recumbent and sleeping form of Private Jovan Parakof, sentry over No. 3 post, 2nd Company, 1st Battalion, 54th Regiment, 18th Division, 9th Corps of the Neo-Cadonian Army. His rifle lay at his side, and Hadji at once recognized that here was a heaven-sent opportunity of adding one to the depleted arsenal of the Z.N.R.M. He also annexed Private Parakof's cap, partly as a souvenir and partly in order to produce it before the local sub-committee of the Z.N.R.M. as corroborative evidence of his statement as to how he had acquired the rifle, the capture of which would add greatly to his prestige. He then moved to the shelter of some adjacent bushes; and, thinking that it would be fun to see or hear something of the commotion caused by the loss of the rifle, discharged a stone at the still sleeping Parakof and started running towards the crest of the ridge, leaving the hut which housed the remainder of the post fifty yards to his right.

By a marvellous fluke the stone hit Parakof full on the forehead. He started up, instinctively felt for his rifle, and, after an agitated search, realized that it had gone. Visions of a court-martial rose before him, so he sat down to consider his position, and eventually

decided on a possible line of bluff. He accordingly ran wildly towards the hut shouting as loudly as possible. The remainder of the post, awakened from sleep, rushed out just as he reached the door. In an excited and breathless voice he explained to the corporal that he had noticed something moving in the bushes near by and had run forward to get a better view. In doing so he had tripped over something in the dark and fallen heavily, striking his head against a stone with a result to his forehead which he indicated to his listeners. The fall, he said, had dazed him, and when he came to he found his rifle had gone.

The corporal with many oaths and execrations told him exactly what he thought of him, and then began to consider his own position. That morning the divisional commander had inspected the frontier posts and had expressed himself as most dissatisfied with what he had seen. His displeasure had been duly communicated to all ranks by harassed officers trying to get their own back, and the corporal trembled to think of what might happen if he owned up to such a ridiculous thing having happened on his post. He therefore hastily instructed his men that the story for higher authority would be that the post had been heavily attacked by *comitadjis* and that the attack had been gallantly repulsed by the heavy fire of the defenders which would begin forthwith. The rattle of musketry, accordingly, disturbed the silence of the valley of the Rakovska. It was heard by neighbouring posts, whose sentries, with memories of the disagreeable results of the morning's inspection fresh in their minds, thought it best to be on the safe side, and so also gave unmistakable signs of their alertness by firing. Before long the opposite Rurakian posts, realizing from the bullets whistling over their heads that the firing was in their direction, thought it best to reply. By the time Hadji reached the fair Nadega the two opposing frontier forces were shooting at one another on a front of several miles and reserve companies were being hurried forward to the front line.

II

The colonel of the 54th Regiment was about to go to bed. He was feeling thoroughly disgruntled ; at the inspection that morning he had been left with no illusions as to the divisional commander's opinion of the efficiency of his command. As he was ruminating on his prospects of further promotion his adjutant appeared at the door.

"There is the sound of heavy firing outside, Sir. I think there must be an attack of some sort on our frontier posts."

The colonel considered this piece of information for a moment in silence. Did it portend a heaven-sent opportunity for rehabilitating his damaged reputation? A plan of action occurred to him; hopefully he gave his instructions.

"Ring up the division at once and tell them that a large force of *comitadjis* is making a determined attack on our frontier posts, but that owing to the strict discipline of my men and the tactical soundness of my dispositions it is making no headway. Say that I have the situation well in hand. When you have done that ring the 1st and 2nd Battalions and find out what it's all about. Oh, and tell the 3rd Battalion to get ready to move at half an hour's notice, we may want them."

There was no sleep for any one at the regimental headquarters that night. In a couple of hours the firing on the frontier had completely died down, but the rest of the night was occupied with feverish endeavours to find out exactly what had happened. The commanders of the two battalions finding the frontier posts, reported that all their posts stated that they had seen men crossing the frontier in their respective sectors, the aggregate of the estimates of numbers reaching a figure of over 1,000. On the other hand it was puzzling that, as dawn revealed the battlefield, only one set of footprints could be found in spite of the fact that the ground over which the advance was alleged to have taken place was mostly very soft. Further, although most posts reported that their fire had been replied to, no casualties had occurred in the regiment.

On one point all those in authority were unanimous. Whatever the lack of corroborative evidence on the ground, it was essential that the story already told to the division should not only be stoutly maintained but also further embroidered. Accordingly, when about 8 a.m. the divisional commander arrived to investigate the situation on the spot, he was told that several leading members of the Z.N.R.M. had actually been recognized in the forefront of the battle; while the loss of Private Parakof's rifle was invested with a wealth of picturesque detail, it being said that he had alone opposed a rush of twenty *comitadjis* and had been rescued from the jaws of death, but not from disarmament, by a gallant bayonet charge on the part of the rest of the post. An unfortunate pig was even slaughtered in order to provide gore for the bayonets.

The divisional commander was a highly ambitious soldier who firmly believed that the shortest cut to promotion was to magnify as much as possible the achievements of his command, while delicately hinting that its efficiency was entirely due to the soundness of his

methods of training. Thus the ever growing snowball rolled through the 18th Division and 9th Corps to the Ministry of War in Prtljagrad, capital of Neo-Cadonia.

III

The little restaurant kept by Alexis Pavlovitch Dekidof, who, like all good Russian refugees in the Balkans, claimed to be an ex-colonel of the Cossacks of the Guard, had achieved considerable popularity among the diplomatists and foreign colony of Prtljagrad. It is true that customers were forced to eat their food in extreme discomfort, but they enjoyed a compensating advantage in that it was cooked rather less badly than in the more pretentious restaurants boasted by the capital. No waiters were employed, all the viands were set out on a counter ; and customers, with a fork in one hand and a plate in the other, foraged for themselves, while Alexis Pavlovitch behind the counter performed prodigies of mental arithmetic to keep pace with what each person took.

On the afternoon following the stirring events already described Lieut.-Colonel Lawrence Carruthers, British Military Attaché, his French colleague Colonel Doumont and Mr. Hiram J. Hocking, chief representative of Standard Oil in Neo-Cadonia, having helped themselves at the counter, were seated at a table for four—the fourth place awaited the arrival of Basil Mildmay, First Secretary of the British Legation. After lunch Great Britain was to engage France and the United States in a foursome.

Conversation turned on the latest Neo-Cadonian political crisis. The existing government was a coalition of the Nationalist and Agrarian Peasants parties, totaling 125 seats in the Chamber ; the opposition comprised the Social Democrats, the Popular Liberals and the Communists, totaling 123 seats. The balance of power was held by a small group of 30 members calling themselves the Dissident Radicals. Hitherto they had supported the Government, but unfortunately a few days previously the Foreign Minister, Monsieur Nanolovski, had lost his temper in the Chamber and grossly insulted Monsieur Hadjikof, the Dissident Radical leader. The latter party had now issued an ultimatum. Either Nanolovski must resign and be replaced by Hadjikof, or they would transfer their allegiance to the Opposition and turn out the Government.

“ Well, I wonder what happened at the Cabinet meeting this morning,” remarked Carruthers. “ Hocking, what price friend Hadjikof as his country’s representative in the maelstrom of foreign politics ? ”

"Well, I guess he'd have no more chance amongst all the old stagers than a wax cat chased through hell by a pack of asbestos dogs. Nanolovski is the best man this durned country's got; you bet your life there's no one else could keep the Neo-Cadonian end up over the Zhukomanian question so long as Rurakia had Plastic at the Foreign Ministry in Garapopolis."

"*Mon Dieu, mais je le crois bien,*" remarked Doumont, "but what of Zhukomania, my friend, shall we have trouble there this spring? For myself I think not."

"No, I guess you're right. As you know our travellers go about all over the Balkans and pick up a lot of backstairs gossip. Johnston, our man at Garapopolis, was through here yesterday going on leave, and he told me it was pretty sure the Z.N.R.M. would take a holiday this year, what with their row with Moscow and what not. What do you think, Carruthers?"

"Yes, I think they will probably do nothing this year from what I hear, but some one may trot out the dear old *comitadji* bogey as a red herring to draw across another trail. For instance the shemozzle over Nanolovski and Hadjikof might all be conveniently forgotten in the turmoil of a manufactured Zhukomanian crisis. Hullo, Basil, is the international horizon clouded?"

Basil Mildmay entered flushed and excited. "Yes, by Jove it is," he exclaimed. "Just as I was starting to come here the Minister came to the Chancery. He had just come from the Ministry of Foreign Affairs where he saw Nanolovski after the Cabinet meeting. It seems that just as the Cabinet was starting to discuss the Hadjikof affair the Minister of War produced a wire from the IX Corps saying that there was the world's largest *comitadji* raid on its part of the frontier last night. It claims to have recognized some of the leaders of the Z.N.R.M. The Government is issuing what Nanolovski described as 'a clarion call' to the country, and old Hadjikof is quite forgotten."

"What a prophet I am!" murmured Carruthers.

"The Minister," continued Mildmay, "wants you to go at once to the Ministry of War, Lawrence, and see what you can find out. I'm afraid golf is off; I've just time for a bite and then I must rush back to the Chancery."

IV

Forty-eight hours later Sir Mathew Constable, the British Minister in Prtljagrad, was writing a despatch to Lord Bicester,

Secretary of State for Foreign Affairs, on the crisis. Laying down his pen he read over the last paragraph before him :

“ While not wishing to appear in any way to minimize the gravity of the situation, and while realizing that it is always the unexpected that occurs in the Balkans, I cannot help feeling that it will eventually be found that the facts of the alleged raid have been greatly exaggerated. It is well known that the finances of the Z.N.R.M. have for some time been at a low ebb, and many of the leaders are believed to have left the Balkans in order to collect money from sympathisers abroad. It seems hardly likely that they would choose such a moment to create any large disturbance.”

As he finished reading Carruthers entered the room.

“ I have just come from the Ministry of War,” he said. “ I saw the Chief of the General Staff, who was very bellicose, and said he had urged the Minister of War to persuade the Cabinet to order general mobilization. I asked him if he could tell me which of the leaders of the Z.N.R.M. had been recognized in the raid. He said there was definite evidence that Purotovski was there. When I pointed out that it was common knowledge that Purotovski had gone to Moscow to try to make peace with the Third International, he became rather confused. You know I really believe the whole story is a red herring to distract attention from the internal troubles of the Cabinet.”

Sir Mathew nodded. “ It may be so. I saw Nanolovski this morning and he talked in rather the same strain. I read him the telegram I’d had from the Secretary of State urging moderation, and he said so great was his personal feeling for Lord Bicester that he would do what he could, but that public opinion was greatly inflamed and so on : you know the sort of thing.”

At this moment Basil Mildmay appeared.

“ Here is a telegram to the Foreign Office from the Legation at Garapopolis which has been repeated to us, sir. It seems the fat is fairly in the fire.”

Sir Mathew took the telegram and read aloud :

“ Rurakian Government state that it has definite proof that Neo-Cadonian troops crossed the frontier on night of alleged raid. I understand some article of Neo-Cadonian uniform has been found on Rurakian soil. It bears the name and regiment of the soldier to whom it belonged. It has been left where found and Government proposes to appeal to the League of Nations to appoint an international commission to visit the spot, check its position and take sworn depositions of officers who found the article. It suggests that commission should then examine books of Neo-Cadonian regiment concerned and see if the man is serving in it.”

"What does our military expert think of that?"

"Well," replied Carruthers, "of course there is always the danger that some fire-eater of a young officer or non-commissioned officer may lose his head and take his command where they have no business to go. Such things, as you know, have happened in the past, not only in the Balkans either. But without further details it's really impossible to express an opinion. The accusation certainly won't tend to cool tempers at this end, and, if it should turn out to be a mare's nest, it will cause an awful lot of bad blood, and won't be forgotten in a hurry either."

"But surely," broke in Mildmay, "the Rurakian Government wouldn't be such fools as to make the accusation and suggest a League inquiry unless they were pretty sure they had a good case."

Sir Mathew shook his head.

"I don't think I would go so far as that, Mildmay. Plastic is the most astute politician in the Balkans, and knows full well that these good people are the worst propagandists in the world; when they have got a good case they always make it look like a bad one. Now is it likely that Nanolovski and Co. will agree to this suggested examination of the books of a regiment? Personally I wouldn't if I was them. Besides what good would it do anyway? The mere fact that a piece of personal property is found somewhere doesn't of itself prove that the owner has been there. No, the League of Nations will make itself ridiculous if it appoints commissions to examine derelict garments in Balkan valleys. Now I think it very probable that Plastic is gambling on the thing breaking down one way or the other. If the Neo-Cadonians won't have the regimental books examined, he will say they have a guilty conscience, and, if the League refuses to go into the local old clo' business, he will loudly proclaim that the Powers have always urged him to go to the League with his troubles, and now when he does it refuses to help him. However, I suppose I must find out what they say about it here. Ring up the Ministry of Foreign Affairs, Mildmay, and ask whether Nanolovski can see me this afternoon."

Epilogue

The same evening Hadji Popicofski was sitting in the hut, which was the nearest approach to a home that he possessed, nursing the stolen rifle and thinking of his pleasant evening with Nadeja. His only regret was that he had lost Private Parakof's cap. He would no doubt have been duly edified had he known that

the cap, closely guarded by the Rurakian Army, was still lying where he had accidentally dropped it, awaiting the arrival of a commission to be appointed by the League of Nations to investigate on the spot the alleged violation of Rurakian soil by the Neo-Cadonian Army.

He would also, no doubt, have been surprised had he known that, thanks to him, the G.S.O.3 of the Balkan sub-section of the Directorate of Military Intelligence was, at that very moment, long after normal working hours, still sitting disconsolate at his office table, an oasis in the midst of a desert of Foreign Office telegrams.

WINTER TACTICS IN THE FINNISH ARMY

BY MAJOR E. W. POLSON NEWMAN

AN unusual feature in the military aspect of Finland is the fact that operations are in many ways facilitated in winter owing to snow and ice, as in other seasons of the year the Finnish Army has to adapt a special form of warfare suited to the geographical features of the country, which consist largely of forest areas divided up by a vast number of lakes and waterways. Field operations such as are carried out in most European countries are thus more or less impracticable in Finland, and a special form of guerilla tactics has become the leading feature in Finnish military training. In the spring and summer Finland is admirably adapted for defensive operations, but in winter the snow and ice convert most of the natural defences into terrain well suited for offensive action. The factor which brings about this revolutionary change in the whole aspect of Finnish military operations is the use of ski-troops, which can go anywhere with considerable rapidity and are only dependent on roads and railways for heavy transport and supply trains. With the coming of winter every man in the Finnish Army takes to skis, the whole military machine becomes more mobile, and swift offensive action is the aim of all military commanders.

As early as the year 1590 it was proved in Finland that, when snow was plentiful, ski-troops were superior to infantry ; for in that year a small Finnish force of not more than 600 men on skis, recruited from two parishes, forced the retirement of a Russian force vastly superior in numbers. In the year 1608 Karl XI of Sweden (Finland was then under Swedish rule) ordered Jakob de la Gardie to raise "ski-men" in the counties of Savo and Viipuri, while in the following year the King gave instructions to the Governor of Ostrobothnia to recruit a force of 2,000 skiers to deliver an attack upon Russia. At the period Jakob de la Gardie made extensive use of ski-troops in campaigns carried out in the depths of Russia, and found them particularly useful in the carrying out of reconnaissance duties. In 1610 the snow was so deep that it was very

difficult for cavalry to operate, so ski-troops were employed instead of mounted troops and acquitted themselves with considerable distinction. But in those days the ski-troops in Finland were only temporary conscripts and received no special military training.

The first military commander to attempt regular training was Stjernstedt, the Governor of the Kyminkartano-Savonlinna county, who raised the efficiency of his ski-troops to a high level. Under his command the skiers were formed into much larger units, and played a more important part in decisive engagements. Amongst the most distinguished ski-units were the Carelians, who were very successful in their guerilla tactics on the Russian frontier, repelling strong Russian attacks and inflicting heavy casualties. In the war of 1788-1790 there was a further development in the organization of ski-troops as an integral part of the frontier militia, and from that time forward ski exercises became a regular feature of training in time of peace.

In 1806 the Swedish War College proposed the formation of Regular ski-troops. These were described as light infantry troops who could carry out difficult movements even in deep snow and could cover distances of from forty to sixty miles a day. Instructions were issued detailing the most suitable clothing, arms and equipment, and explaining the special exercises recommended for the training of the men. This was the first real attempt to place ski-troops on an organized basis in Finland, and it had only been partially carried into effect when the Russo-Swedish war of 1808-1809 broke out. By this time only one company (the Rautalampi Company) had received a thorough training in military ski-ing, so that in this campaign ski-troops as a whole were in a state of transformation and could not be employed to the best advantage.

In 1880 ski-ing was established as a sport in the battalions of the Finnish Army. Race tracks from $1\frac{1}{2}$ to 12 miles in length were instituted and competitions across country and on ice paths were also carried out. The men skied with their full equipment, weighing about 80 lbs. In 1892 the Turku battalion achieved the following results. On an ice path of 18 miles the average time taken by 100 privates was two hours, twenty-five minutes, and the best time recorded was two hours, seven minutes. Special attention was paid to the training of the so-called "Hunting Commands," which undertook long cross-country journeys. The Hunting Command of the Kuopio Battalion marched for twenty-nine days, covering a distance of 534 miles, the average distance covered in a day being 18 miles and the longest day's march 43 miles. In 1898 the question

of forming ski units as a special branch of the Service came up for further consideration, but the subsequent disbandment of the Finnish Army (Finland was then under the domination of Russia) prevented any progress in this direction. In fact, Finnish military history shows that, although the Finns have employed ski-troops in some form or another for all their campaigns, these troops have never been actually organized as special units in the Army.

It was not until after the War of Independence of 1918, when the Finns defeated the Bolsheviks and actually secured their independence which had been declared in the preceding year, that special ski battalions were formed and steps taken to equip the whole Finnish Army with skis. Three special ski units were raised, and they were so organized that during the summer months they became cyclist units.

In order to appreciate the value and possibilities of ski-ing in the Finnish Army, it is necessary to know something of local winter conditions. The maximum depth of snow in Finland in normal conditions varies in different parts of the country from about 8 to 12 inches in the south-west to over 35 inches on the eastern frontier. In the southern part of the country and in the interior the depth varies from 20 to 28 inches.

On the other hand, when the snowfall is unusually heavy, the depth varies from 40 inches in south-western Finland to 71 inches on the eastern frontier and 95 inches in the north.

The ground is covered with snow for a period varying from five to seven months according to the locality, but the country is not necessarily suitable for ski-ing during the whole of the winter season, except in northern and eastern Finland. The depth of the snow crust varies in different parts of the country, being greater in the north and on the Carelian Isthmus where the average depth is over 3 feet, and less in the south and on the shores of the Ostrobothnian coast. The snow is for the most part like fine dry powder, admirably suited for the running of skis; but in windy weather the snow on the open spaces of the lakes and other localities becomes at times a hard, packed mass, on which the running of skis is more difficult. During the greater part of the winter the snow is soft, so that the skis sink gently into it and are easy to control. The hard, rough snow of the middle and south-European Alps, which is so wearing on skis, is only found in Finland in late winter, when hard crusted surfaces, formed by the snow melting in a thaw or rain and then re-freezing, are also liable to occur. The skis then run smoothly without sinking into the snow, and in the hidden recesses of the

forests or in the wide open spaces the traveller is carried along easily and swiftly.

In some parts of Finland the people have always had to use skis for winter travel, but in 1880 ski-ing became a popular sport and the use of skis became universal. Competitions were held on the ice of the Gulf of Finland and Gulf of Bothnia or on the flat ground ashore. The type of skis used was very long (about $9\frac{1}{2}$ feet) and narrow (about $1\frac{1}{2}$ inches) with a view to obtaining greater speed. Speed is the quality in which the Finns specially excel, and they are at their best on their own flat terrain. In competitions held in Finland or Sweden the Finns have always beaten the Norwegians and Swedes, but in Norway they have only once been successful. In Switzerland they have not been particularly successful, although the Finnish military patrol won the second prize in 1924 and in the competition held this year.*

Since the War of Independence it has been realized that ski-ing over difficult country is much more useful from a military standpoint than mere speed competitions, although efficiency in speed contributes to general mobility. Endeavours have, therefore, been made to bring civilian competitions more into line with military requirements. The ski has been shortened to from $7\frac{1}{2}$ to 8 feet in length with a breadth of about 3 inches, which not only makes it more suitable for cross-country work and military purposes generally, but it brings Finnish ski-ing more into conformity with that practised in Scandinavia and in the Alps.

The War of Independence gave a great stimulus to ski-ing throughout Finland generally, and it is now rare to find a recruit who is not fairly proficient in the use of skis. Among the ranks of the Civic Guards, in which a great number of civilians receive a sound military training, ski-ing is strongly encouraged and the youth of the country take to skis at an early age through force of circumstances if for no other reason. Ski-ing, in fact, is becoming a national pastime, in which the people take a considerable pride, and badges of efficiency are coveted much in the same way as rifle shooting badges are coveted in our Territorial Army. But I do not mean to imply by this that rifle shooting takes a secondary place in Finland. This is far from being the case, for rifle clubs also provide a very popular pastime for the younger members of the civilian population,

* The Finnish speed records, which are also world records, are as follows :—

10 kilometres	..	..	..	..	26 minutes, 54 seconds.
20	..	..	..	..	1 hour, 47.5 seconds.
30	..	..	..	..	1 hour, 43 minutes, 10 seconds.
50	..	..	..	..	3 " 6 " 46 "

and rifle shooting has reached a high standard in the Finnish Army

When the recruits join the Army for their term of military service, they need little instruction in actual ski-ing, and it is only necessary to teach them to move on skis with arms and equipment, to transport machine guns, and to perform the necessary evolutions on the snow or ice. The organization of the Army in winter is precisely the same as in other seasons of the year, although its work is modified to meet the changed conditions of movement and supply. The speed of marching is greatly increased, but the columns are much longer owing to the skis and the march formations adopted. Supply and transport arrangements need little alteration in principle, and means have been devised to ensure that increased mobility does not entail delay in maintaining an adequate supply system. The Finns are by nature methodical and careful, and in the Finnish Army there is no need to fear a breakdown in the supply service.

When the snow comes, the whole Army moves on skis. The troops can go anywhere, and water is no obstacle. The country is a great frozen crust. While heavy transport moves by rail or road, the light transport is drawn in small Lapland sledges by men with ropes over their shoulders. For heavy transport moving by road horse sleighs are used as well as caterpillar motor tractors with several sleighs attached. These tractors, however, are only at present in the experimental stage, and have not yet been universally adopted. The artillery also moves on skis. The guns are carried on sleighs drawn by horses, or have special heavy skis fitted to the wheels of the carriages. In column of route they remain on the sledges or are drawn on their skis, but when going into action they are always drawn on their skis. They are either drawn by horses or man-handled according to circumstances. Machine guns are mounted on small sledges, drawn in the same manner as those used for light transport, but in column of route they are usually packed together on sleighs drawn by horses. The machine guns also have skis attached to their mountings for purposes of action, which makes them a weapon of great mobility. Ammunition is carried partly on the soldier, partly in regimental reserves on hand-drawn sledges, and partly in large reserves carried on sleighs or motor tractors operating on the roads. The small Lapland sledges form the connecting links between the troops in action and the columns, and their mobility enables them to maintain a supply system over a considerable distance.

It might be imagined that, under conditions such as I have

described, cavalry would be employed as a dismounted arm, but this is not the case. In winter the Finnish cavalry operates as a mounted force. It is quite common for troopers to trot along the roads with several skiers in tow, while the special ski battalions, companies and patrols assist the cavalry in reconnaissance and other duties.

The usual march formation is in file at each side of the road. The columns are in consequence much longer than those of troops marching in fours, and their length is still further increased by the distance necessary between the files. A normal day's march on roads with horse and sleigh transport is about 25 miles, while the maximum forced march without transport is about 62 miles. The following example of a ski march done last winter by the Tampere Regiment gives a good idea of the capacity of the Finnish Army in this direction. The whole Regiment skied a distance of 186 miles, covering 45 miles in the last day's march without any straggling. The men of this particular Regiment do not come from a part of the country specially renowned for proficiency in ski-ing, and there was on this occasion no question of a test or competition.

No ground is too difficult for ski-troops, who are independent of routes and quarters. As a rule the troops are billeted in winter, but this is by no means necessary. If no billets are available, the men build small log huts, cone-shaped, with branches and brushwood over which they heap tightly-packed snow. A hole is left at the top for smoke, and a fire is lit inside. As these bivouacs are nearly always situated in woods or forests, it is unnecessary to consider the question of visibility and fires can be lit on most occasions, even when the enemy is comparatively close. There is, therefore, little danger of the troops suffering undue hardship during winter operations in Finland.

In the attack the formations used are the same as under normal conditions, but the only entrenchments possible are such as provide protection from view. Not only is the snow too deep to permit of digging, but the ground beneath is frozen so hard that it would be impossible to use a pick and shovel. In defensive operations this creates a formidable difficulty, and provides another very sound reason why offensive tactics are eminently desirable in winter.

Winter conditions also have an important influence on the use of aircraft. Although Finland is a comparatively flat country, the great number of lakes and waterways makes the question of aerodromes and landing places one of considerable difficulty. But when the whole country is covered with its winter crust, every lake

becomes an aerodrome and there is ample choice of landing places in nearly every locality. For landing purposes both aeroplanes and seaplanes are fitted with skis, so that the number of aircraft available for land operations is considerably increased.

For commanders and staff officers winter warfare in Finland entails quick and careful decision, for the increased mobility provided by the use of skis makes tactics a much more delicate art than it is under ordinary conditions. While movements can be carried out in winter, which would be impossible at any other season of the year, the most careful staff work is necessary to ensure that there are no hitches which might entail defensive operations under the most difficult conditions. Surprise plays an important part in all winter operations on skis, and it is more important "to hit first, to hit unexpectedly and to hit hard," than it is to "keep on hitting."

Ski-warfare is a subject which provides not only a most interesting study in itself, but which may produce tactical ideas capable of development by means other than skis. So far as infantry is concerned, the use of skis probably provides the greatest degree of mobility yet discovered, and for this reason merits the closest attention. In Finland, manœuvres under war conditions are carried out every winter, when the whole Finnish Army takes the field on skis and the most valuable experience is gained in all arms by all ranks.

THE STORMING OF DARGAI

(20th of December, 1897)

BY LIEUT.-GENERAL SIR GEORGE MACMUNN, K.C.B., K.C.S.I.,
D.S.O.

THE coming of new wars dims the memory and the glory of those that are past, as the Peninsular drove the memories of Blenheim and Malplaquet and of Dettingen from men's minds, and salved the sores left by the American War and the follies of Flanders. South Africa dimmed the romance of the great war on the Indian Frontier of 1897, and the Great War thrust South Africa to the limbo of old forgotten things. But now and again it is good to take out the old stories and polish them up to be read, like the Apocrypha, for the benefit of learning and instruction.

Now the storming of Dargai is worth re-telling, not only for the excitement and daring of the episode, a small enough one as such things go, but for its high mountain setting and all the great drama and romance that hangs round the frontier hills of India, since Alexander of Macedon swept through them out of Bactria or Nadir Shah the Turk of Persia relieved his Mogul cousin of the Peacock throne.

It is now thirty years since Dargai was stormed and it is not necessary here to examine in any detail the story of the tribal borders, suffice it to say that the pushing forward of our outposts to improve our tactical and strategical position, and to be the better able to carry out our pledge to Afghanistan of assistance against Russia, had irritated and inflamed many of the clans. Added to this, the recent victory of Turkey over Greece had but added fuel to the Islamic enthusiasm which is always latent, and the drum ecclesiastic was openly beaten along the border.

At that period the Army in India had completed for the first time a general scheme of mobilization based on modern lines in which every unit knew its place, and in which railway supplies and departmental services were interwoven. The threat of Russia to Afghanistan and India had produced the need for an up-to-date organization, and it was very soon to be put to the test.

Early in the summer of 1897 the first outbreak began, dramatic enough in its setting, but without giving any alarm as to what was in store. Up in Waziristan, since the Wana affair of three years before, a British force had occupied one of the trade routes from Ghuzni. A political officer with a small escort was touring the district, settling discussions and disputes, and had camped at Maizar. The troops, drawn from the Frontier Force, acknowledged experts, but, like all experts, apt to grow careless, were suddenly attacked by the friendly tribesmen, in a very unmilitary position. Heavy losses took place and the detachment extricated itself with great difficulty. This started a local blaze, and, although the hot weather had set in, troops of all kinds were hurried to the area. A month or so later, to every one's surprise, the fire broke out a hundred miles or so farther north. The garrison in the Swat valley and on the top of the Malakand, close to the old Græco-Bactrian road, were most unexpectedly and heavily attacked by a large and fanatical gathering of the clans which had come over the valleys from far and near.

The defence and the relief entailed some fierce fighting. The attacking tribesmen, blessed by their priests, believed that those who doubted not were immune to British bullets and that British walls would fall as the faithful reached them. Despite the throes of a Punjab summer, divisions were hastily mobilized and pushed up to the border. A considerable force now proceeded to visit the valleys north of Peshawur from which the attackers had come, and some severe fighting was witnessed. But hardly a month had elapsed when a burst of flame appeared near Peshawur itself, and the powerful Mohmand tribes poured across the border to be met in scorching heat by a British and Indian force at Shubkaddar in an action chiefly memorable for a charge by a portion of the 13th Bengal Lancers. Again was the mobilization scheme put into effect and more troops started for the border. But before the battalions and brigadiers could reach their brigades, fresh troubles broke out, north and south and east and west. The Khaiber Pass itself and the hills beyond lay chiefly among the Afridi tribes. By a convention of many years' standing, the chiefs in return for allowances maintained a corps of rifles, guided, and more or less managed, by the Political Officer of the Khaiber. The Afridi tribes caught the prevailing infection, and rose against law and order to which they were sworn. Then arose a series of incidents of which the Army in India still thinks with a shudder. The British officer in the Khaiber, heart and soul with the Khaiber Rifles, was called in to see his chief at Peshawur. Leaving the men who were prepared to hold the Khaiber forts against their

own clansmen, expecting to be with them in a day, he withdrew. To his chagrin and anger he was not allowed to return, and the Rifles, after a desperate fight alone, lost their forts and the whole Khaiber was in a blaze. The confusion in India was now immense. No mobilization scheme could stand it. Units and commanders coming up in ordered procession were switched and diverted at odd railway stations to stem the current of rising and inroad as the needs of the hour demanded. But half India was moving up to the frontier. On a clear night, those in the Samana forts, looking anxiously westward, could see smoking trains far away across the plains of the Punjab, waiting at the crossing stations with their loads of troops and transport. But the Samana forts were to fall under the wave of tribal fury before the trains could get their loads to the mountains. With the Khaiber a raging whirlpool, the Orakzais could not keep quiet, and they surged over the Samana posts, Regulars and Militia, burning Saragarhi and massacring its Sikh garrison, and then swarmed into Kurram and Miranzai. Kohat, the frontier station on the way to the Kurram, was not then on the railway. Troops from the Indus railhead were marching up, but for some days the tribes had a free hand, to be seen in the shape of burnt police posts and smoking homesteads.

Thus sporadically, where least expected, the frontier "went" till the conflagration had spread along the whole border. But the Army was now assembling. The tribes round the Malakand and the Mohmands had been subdued and punished, and, after much debate, the Government of India, stirred by public opinion after the disgraceful episodes of the Khaiber forts—a contumely, however, not quite so deserved as appearances suggested—decided that they would once and for all, in the picturesque frontier metaphor, "lift the Purdah," and penetrate into the fabulous Afridi Tirah and show those boastful and turbulent tribesmen that if the patience of Government "was as protracted as a winter's night, its arm was as long as a summer's day." It was decided to enter that great upland via the Miranzai, and cut across the valleys by entering them high up, over the Chagru Kotal which led out of Miranzai. By following the Miranzai valley from Kohat the lie of the land made this possible, so that instead of fighting our way up long valleys between high hills, a force could concentrate by a fine road in accessible country, and, if well-equipped for mountain fighting, could cut across the valleys near their tops and descend on to the legendary plateaus in the heart of Afridi Tirah . . . legendary because, while the Afridis often "*bukhed*" of their glories, no Europeans had seen them.

It was my good fortune to take some part in the operations for the relief of the Samana posts, in those hot days when the conflagration was still breaking out. I had been for some years training Imperial Service Artillery, and had been sent up with Cookson * and the Jeypur Transport Train.

While the flames roared and the troops climbed on the Samana heights we had brought up convoy after convoy of stores in our light carts from our railhead on the Indus, in intense heat. When the Government had decided to lift the Afridi Purdah, every mountain gun was wanted, and I was ordered back to Jammu to mobilize and bring up to Kohat one of the batteries I had been training (No. 1 Kashmir Mountain Battery), and in a couple of weeks returned to find a very large force assembling under the high bastions of the old Sikh fortress in Kohat ; and a very memorable sight it was. Two divisions were assembling and marching up to Shinawri, forty-five miles from Kohat, a plain lying below the Samana, under the great pass of the Chagru Kotal above which the high cliffs of the Dargai ridge frowned down on the roadway.

As I marched with my guns into Kohat, long lines of troops and transport could be seen winding down from the pass which led from Peshawur, whence the troops who had been dealing with the Mohmands were now coming to join the rest of Tirah force. As these filed over the passes, other brigades were passing from Kohat up to the place of assembly. Sir William Lockhart was to command the force. General Yeatman Biggs, R.A., long known to his corps as "Y. B.," had the 2nd Division, of which a considerable portion was already on the Samana. Penn-Symonds, then of outstanding fame, had the 1st Division, which was assembling at Kohat. But while the divisions hastened to the gathering, another famous Indian soldier, Sir Power Palmer, or "Long P.," as we called him, was commanding the troops as they assembled and would control the communications. As we marched amid the echelons out of Kohat, he and his staff jostled past us a-horseback, for the days of generals and staffs in motor cars had not yet come to jockey the marching troops. The weather had changed, the nights had grown cold and the heat of the days had passed, for it was now mid-December, and the concentration at Shinawri was nearly complete. The 2nd Division was either there or on the Samana hill-top close by, and the 1st Division was already half assembled.

Above the plain at Shinawri rose the great hills. Looking up

* Later Major-General Cookson, long affectionately known in India as "Cookie."

at the Kotal 4,000 feet above us, we could see the mountain path, for it was little more, winding up a long spur. On the right of the pass, the Samana range itself came to an end in the mountain known as the Samana Sukh, which overhung the pass and the gorges on the far side. On the opposite side of the pass, and perhaps 500 feet higher, the great cliffs of the Dargai ridge also overhung in sheer precipice the defiles down which the road wound to Karrappa in the Khanki valley, the home of the Orakzai tribes, who were now "for it" for their share in the attack on the Samana forts and their raids into Miranzai.

From the top of the pass, the ridge of the Chagru Kotal was connected by a long steep spur with the Dargai ridge, running into it by a narrow neck with precipitous sides, which joined the foot of the cliffs some 400 feet from the summit, and from whence a goat track led slanting up the face of the cliffs. To the left of this neck the slopes fell away for many hundreds of feet in steep boulder and scrub-clad shale which led nowhere. To the right of the junction neck, the gorge dropped precipitous and dark, choked with scrub and fallen rocks, to the valley on the road to Karrappa. Now it was fairly obvious and in accordance with all rules that it would be impossible to commit the long lines of troops and vast convoys to this deep gorge, or even to the top of the pass, without holding the Dargai ridge, which was less than a mile from the bare top of the pass.

Before we turn to the tactical action of the forcing and crossing of the pass, we had better look at the organization of the transport, for it is with this knowledge that we can learn some lessons which still hold good, and will hold good even when mechanical and electric mules scale mountain passes. The Army in India as a whole had very little organized transport, though the Frontier Force had excellent regimental animals. A very few mules and mule carts were maintained at the larger up-country stations. The work of the Army in its garrison was done by the carts and camels of the countryside, by contractors. All of which was very right and proper. No country wants to feed standing transport in time of peace. But, on the other hand, unless it has some system of organizing the resources of civil life it cannot tackle sudden war. For generations this question of transport appears a lurid streak in Indian campaigns and has torn the guts out of the Indian Exchequer. In the days of Lake and Wellesley, the country was entirely served by bullock and camel, and long years of war had produced an efficient system of using them, which was soon forgotten in peace. It will be remembered how the Commander-in-Chief in India and the European troops from the

Simla hills trying to retake Delhi after the outbreak in 1857 were delayed for weeks, while collecting "carriage." The story of the Afghan War of 1878-1880 is largely the story of "carriage." The old art had been forgotten, and things were no better in 1897. The orders had gone forth to hire and to impress. But hiring is not always easy in times of danger, and to impress means animals without attendants. Tens of thousands of animals hastily impressed, dishonestly purchased, often without attendants and gear, were pushed up to the bases of the Army. Rubbishy gear was hastily bought and manufactured, worthless attendants were crimped and clothed. Willing but inexperienced officers and non-commissioned officers from units not mobilized were brought up to endeavour to evolve order out of chaos. And a good transport officer, here as in South Africa, was worth his weight in gold. Soldiers who can fight are always available. Men who can and will organize behind the line are harder to come by. When I went up to the Miranzai, with the Jeypur Transport, my father, an old-time officer, wrote, "I don't much like this Carter Patterson business." That was the old spirit that spoilt all efficiency of organization. The Knight and the Esquire would only handle sword and lance!

Sir William Lockhart's plans were perfectly straightforward. The force was to advance, the 2nd Division leading, into the Khanki valley. Then one more march, over the Sampagha pass to the head of the Mastura valley, then over once again into the headquarters of the Afridis at Bagh and Maidan, the "garden" and the "plain," the upland glory and boast of Afrididom. With the force was to go a long convoy of pack ponies with ten days' supplies for the two divisions. But the road was not yet fit even for camels. Pack ponies, the miserable little rats of the Markomans and other pack-carrying fraternities, thousands of little donkeys, all equipped with *chatts* often too big for them, all of which would have to wind over these difficult paths in single file behind two divisions, each with thirteen battalions and three mountain batteries all marching in single file, miles and miles and miles of them! The head of the force must reach its destination long before the rear left camp, over pack paths that no one had ever seen. Equipped with this information it is interesting, too, to see the mess that followed.

On the 18th of December that evil thing which crops up mishandled in every military age was carried out—a reconnaissance-in-force of the Kotal and the Dargai heights. A portion of the troops at Shinawri under the command of Sir Power Palmer performed this operation. The Dargai ridge was actually carried in the morning

of that day by the Gordon Highlanders, supported by a couple of mountain batteries, for thirteen casualties. The Orakzai tribesmen who held it were dislodged. But for want of hard thinking and a little *bandobast* the troops returned to camp nearly 5,000 feet below them at Shinawri, and lost fifty men in doing so. An Afridi *lashkar* camped in the Khanki valley had swarmed up the heights and hung on to the British rearguard. By the evening the high cliffs against the distant sky were stiff with their standards, and all the next day the sight remained to stir the gathering Army.

On the 20th of December an early start was made by the 2nd Division, but a strange thing was ordered. The loading of pack convoys is a difficult and lengthy business, requiring much labour, which can only be done just as the animals start, unless they are to stand for hours under load, but this transport, including the ten days' rations, was to be loaded before dawn, for all troops. A wiser administration would have detailed a company * to remain behind with each corps to load when the time to join in the order of march approached.

Up went the head of the column before daylight, winding single file along the interminable road, Brigadier-General Kempster with the 3rd Brigade leading, followed by three mountain batteries. Even this force covered perhaps five miles of road. More troops cut in from the Samana, and a mountain battery and the divisional headquarters moved to the Samana Sukh. Kempster was to sweep along the spur leading from the Kotal to the Dargai heights and to swarm up them as had been done on the 18th. Three mountain batteries on the Kotal and one upon the Sukh were to support him. It was to be a bagatelle, and while Kempster held the ridge and the heights on the left side of the descent, the rest of the force, with its transport, would defile peacefully behind the leading brigade into the valley below. Soon after daybreak the 1/2 Gurkhas under Lieut.-Colonel Travers, followed by the Dorsets and supported by the Derbys (drawn from another brigade), started along the spur to the foot of the cliffs. The remaining two battalions of Kempster's Brigade, the Gordon Highlanders and the 15th Sikhs, waited on the top of the Kotal. With them also were the 3rd Sikhs. The leading battalions passed the still smoking remains of Mahmud Khan, a fortified hamlet that had been destroyed the day of the reconnaissance, and formed up under cover in a small depression behind a ridge whence the short neck already described connected the spur with the foot of the Dargai cliffs. Soon after 8 a.m. the mountain batteries on the

* These were the days of eight companies to a battalion.

Kotal and on the Sukh opened fire on the crest. Colonel Travers led his first few scouts across easily enough to some cover under overhanging rocks. Then the defenders awoke to what was in progress. The remainder of the Gurkhas attempting to join their Colonel in extended order along the narrow neck, encountered a tremendous fire, chiefly of Martini bullets aimed by the best marksmen on the frontier. Every expert in the clefts above had two or three loaders. Hardly a shot missed its billet. The men, dribbling over, were hit time and again, and rolled down the slopes on either side or lay on the fairway. Colonel Travers had hoped, as soon as a fair clump of men joined him, to begin pushing up the goat tracks where there appeared to be occasional cover from rocks. But his party did not increase. The accurately aimed fire swept off all who ventured to join him. Then, after some time had elapsed, General Kempster ordered the Dorsets to try, and a similar fate awaited them. It seemed impossible to get over that fire-swept neck. Then some of the Derbyshire Regiment were ordered to make the attempt—a futile proceeding. There were already crowds of men and stretchers behind the little ridge and in the depression. More men only added to the confusion. All the morning long, this *impasse* grew. The Brigadier was impatient but could not get the rush over the neck. He reported to General Yeatman-Biggs, and asked if it was essential to carry the heights. General Biggs knew that the troops could not be committed to the gorges on the other side until the enemy, whose numbers seemed to be increasing, was driven from the cliffs. Another effort must be made.

Then General Kempster sent for the Gordons and his Sikhs. By mistake the order got to a battalion not under his command, the 3rd Sikhs. The Gordons were moving off and the 3rd Sikhs followed them. Colonel Mathias, commanding the Gordons, received his orders that the heights must be carried at all costs.

The afternoon was now advancing, and Mathias apparently realized that Gordon Highlanders were no more immune than any one else, and that to dribble them over could only mean that the kilts would lie on the slope among Colonel Travers' Gurkhas and the Dorsets. Besides, it was obvious that a long climb up the face of the cliffs was to follow, and that only swarms of men following individual leaders would be likely to make the ascent. In fact it seemed to all onlookers that even when the neck was passed in sufficient numbers a still more difficult task remained.

However, the first thing was to get enough men over the neck to be able to swarm up the cliffs. All the while there was a mass of

tired, thirsty, and dispirited soldiers jambed up with ammunition mules and wounded in the small covered space behind the ridge. With difficulty Mathias got his men formed up in an irregular mass behind cover. He had realized that a mass alone would get over, that in the space of time they were on the ridge only a certain number of men could be hit.

Then occurred the inspiring operation of which so much was written at the time. Colonel Mathias ordered officers and pipers to the front. The Colonel strode out in front and the pipes set up "Cock of the North." And out on to that narrow ridge scrambled a mass of some six hundred cheering Highlanders. The artillery redoubled their supporting fire, and though many men fell, the mass, as the Colonel expected, got over, and in their train came Gurkhas, Sikhs, and the men of Dorset and Derby. Piper Findlater, lying wounded in the neck, played his pipes as the men rushed on, a gallant incident that especially delighted the public.

The neck crossed, the companies set themselves in some confusion to scramble upwards along the slopes and goat-paths and among rocks and crevices. It was a matter of at least three hundred difficult feet, and every one thought it would be the worst ; but no ! the heavy rifle fire soon died away, and the leading files gained the top at various parts almost unmolested. The tribesmen had seized their standards and had gone.

What had happened ? Two things must have contributed to the result. First, of course, the impressive sight of the masses of Highlanders and other units swarming over the neck below, and secondly the artillery fire. The effect of the artillery was in this wise. The marksmen sweeping the neck were ensconced invulnerably among rocks and clefts whence no shrapnel bullet could reach them. In absolute security they picked off the individual figures below them. But when it came to repelling the men swarming up the goat-tracks, it was another matter. The marksmen had to come out of their crevices, and the remainder of the line had to emerge also from behind the rocks and lean far over to fire on the climbers. But then the artillery came into play. From the spluttered marks of the shrapnel bullets it was evident that to do this now meant considerable exposure, while though the batteries below on the Kotal could spatter the top of the rocks, the guns far up on the Sukh could bring a high angle of searching fire. This, together with the breaking of the original spell, destroyed the determination of the tribes.

That is the end of the story, but for learning and instruction let us see the aftermath of the loading order, and of failing to maintain an organization for the expansion of army transport. The ridge was not carried till late in the afternoon. It was quite impossible to think of continuing the march that night. The troops bivouaced as best they could. The convoys stood patiently all that night under load on the hillside for the six or seven miles of road back to Shinari. On the *mazri* clad plain below thousands of animals which had not even started the ascent stood in dark masses the night through. None was watered that night, only near a transport officer were any of the beasts fed. It was quite impossible to take off any loads. Many a weakly animal collapsed under its load in the twenty-six hours they had waited. Then they began to file slowly down the Kotal into the Kanki valley. Thousands collapsed on the difficult descent. Of those that got into camp at the far end, all had been unfed, unwatered, and under load for the best part of forty hours. Thousands died or were destroyed and the whole operation was delayed while fresh convoys of food were organized and fresh beasts brought up from India, all from the folly of what, in those days, passed for staff officers. But it is a thing that might easily happen again, and it is worthy of remembrance as a warning. Plans may go wrong, but even had the heights been carried without delay, those animals would have remained under load for over twenty-four hours without water. Had the course been taken of leaving a hundred men per battalion to load up transport when required, none of this would have happened.

It is not necessary to continue the story. The campaign was carried out with great endurance on the part of the troops, considerable audacity on the part of the tribes, and an exasperating want of good will in the higher machinery which was responsible for many of the regrettable incidents and disasters which took place. We learned a good deal about frontier warfare in the face of the breech-loaders which was very different to facing the old sword and match-lock men. Some brigadiers discovered that it was their business to see that rearguards got home and were supported, and General Kempster's Brigade came in for several hard knocks after the storming of Dargai. To be "Kempstered" became a ribald phrase which the army used, and "I'm Kempstered if I do" a camp expression of dissent, which was perhaps hard on a fighting brigadier—but such is the way of armies.

THE PROVISION OF LEADERS AND INSTRUCTORS ON THE OUTBREAK OF WAR

BY MAJOR KENDAL FRANKS, D.S.O., 5th Mahratta Light Infantry

IN future wars on a large scale what will be the rôle of the Regular Army? The South African and the Russo-Japanese wars, each in its own degree, foreshadowed it for the last war. The lesson was missed. The Great War again brought the lesson into prominence that the rôle of the Regular Army in war is a dual one; at first sight each part incompatible with the other.

The Regular Army, always practically *en état de partir*, is the buffer which will take the first shock of impact, and hold on until the Territorial Army, followed by the Nation-in-Arms, is ready. That is the first part of its rôle.

The Regular Army is a professional army; the Territorial Army—the second line—is composed of part-time soldiers; behind these are the hosts of untrained men who come up, either voluntarily or by conscription at the outbreak, and during the continuance, of the war. All these, except the Regular Army, require training in various degrees. As the Army expands, more and more instructors, leaders, staffs and senior commanders will be required. Whence are they to be obtained? Obviously they ought to come from the Regular professional army.

Owing to the need for the re-creation of the Regular Army for its duty as the first line of the Empire's defence, which entailed complete reorganization and intensive training towards efficiency, it was unable to add to its burdens by organizing for the second half of its rôle immediately after the late war, or during the first few succeeding years. During those years there were hundreds of thousands of men, trained during the Great War, who could be called upon in an emergency. They are rapidly becoming out of date or extinct.

The Regular Army has now again become a highly-trained and organized army; a first-class small war army, and probably the

finest fighting force in the world. In training and efficiency it is ready to carry out the first part of its rôle.

Before and during the first few months of the late war the second part of the Army's rôle was not realized. The result was that, in turn, first the Regular Army with the men who could carry out the training, leading and staffing of the new formations went out to France and were lost ; next the first line Territorials in whose ranks were many who required only a short training to fit them for that job, and with these went the first rush of volunteers. That last phrase in itself proves that the latter were the junior leaders so badly required for the hosts in formation—" K.'s " Army.

During the war the necessity for training staffs and leaders was grasped at home, and every available wounded Regular officer and non-commissioned officer was seized, as soon as he was passed fit for light duty, to help to train the new formations. They were lamentably few, hard to get and unfit for the strain. To train mobs into companies and battalions is too heavy a job for an unfit man. He cannot give of his best, the instruction suffers, and his recovery is retarded. Later, Officer Cadet Battalions were formed to train non-commissioned officers into officers. It was realized at the front in another way. A nucleus of every unit going into action was left behind, on whom the remnants could re-form and by whom the unit could be rebuilt. It was clearly understood immediately after the war by many. For instance, a C.G.S. (India) letter dated January, 1920, on the necessity for educational training for the rank and file of the Regular Army, states : " In the next war a host of Junior leaders will be required." The clear vision was there, but it has since become clouded by circumstances ; circumstances such as the number of trained soldiers of all ranks returned to civil life, and such as the expectation of only small wars for the first few years following the Great War.

As a result of this clouded vision we have gone back to the pre-war ideal for the Regular Army—a magnificent fighting machine, but only an iota in size to the Empire-in-Arms, or to the fighting forces of other nations, and lacking a system for the production of the *personnel* required for the second part of its rôle.

Piecemeal attempts have been made to materialize the idea of a " host of Junior leaders," but they are only tinkering. They do not take into consideration the personal characteristics or powers of the individual. The human factor is ignored. These attempts consist of the addition of new subjects to the pre-war training syllabus, until the soldier is becoming a " Jack of all trades and

master of none." Those officers who are in close touch with the soldier, and who are responsible for his training, despair of fitting the enlarged syllabus into the training year.

The situation is now that officers are expected to teach every man, regardless of his powers or aptitude, to be a first-class rifleman, Lewis gunner, Vickers gunner, and a first-class drill, add to these bombing, gas drill, tactics up to the standard of the next higher rank, and the present complicated evolutions of P.T. Superimposed on all this is a literary education which grows steadily harder. In addition the soldier has to carry out his ordinary duties and recreation.

The day is still composed of twenty-four hours. These attempts appear to aim at making every soldier into a potential leader in war. Whilst voluntary recruiting remains in force the material for training cannot be selected, and this aim can be no more than a pious hope. It is also to be observed that no provision whatever is made for the utilization of these potential leaders, as such, in war, which is the essential conclusion to training them.

A writer in the *Army Quarterly* for January, 1926, explains that the present scheme for expansion is that each battalion of the fourteen Territorial Divisions, shortly after mobilization, throws off a cadre of officers and non-commissioned officers about thirty all told, as a nucleus for a reserve battalion which is to be completed by untrained men. When this battalion is trained, it will in its turn throw off another cadre on which a second reserve battalion will be built up.

This writer doubts "whether the cadres thrown off will be sufficiently advanced themselves to train others efficiently." He then points out that owing to the difference of peace Establishment under war Establishment, loss of the cadre, present deficiency in recruiting and unfits, etc., a Territorial Battalion will mobilize under 30 per cent. of war Establishment. The remaining 70 per cent. will be untrained material. He then adds, "yet these first-line units are expected to be ready to take the field six months after mobilization. This does not seem possible, for it must be remembered that *the Regular Army will be in no position to help to train the Territorials.*" (The emphasis is mine.) This is so now, but it must not remain so.

The British Army has to fight under every condition of warfare, from a small war against tribesmen to a world-wide war. The Regular Army will deal with the small war (which is excellent training). Therefore, the Army must be a self-contained fighting force. In a great war it is the buffer ; a detachment covering the mobiliza-

tion of the nation. Again, the Army must be a self-contained fighting force, but capable of throwing off cadres to assist the nation to mobilize.

During the buffer period it is likely, if not certain, to suffer heavy casualties including leaders and specialists. The first reserve must be so organized that it will keep this force up to strength for the period required for the nation to prepare. This will include the replenishment of leaders and specialists.

For the mobilization of the nation and the expansion of the Army a host of instructors, leaders, etc., will be required. In order to economize time, and to create efficiency, a great percentage of these will have to be found by the Regular Army. These must be trained in the Regular Army, belong to it and fight with it in small wars, but the Army must be so organized that they can be dropped out of their units in a big war and their places be immediately filled, so that they will not be lost to the nation for the wider duty.

If the Army is organized for a great war, the organization can be easily adapted to a small war. We need therefore :

1. A fighting Army at or near war strength.
2. A body of men in, and of, this Army trained and earmarked to instruct, lead and staff the nation-in-arms at the outbreak of war.
3. A system of training to enable these to be trained in peace time for these duties.
4. An organization to enable this body, at the outbreak of war, to drop out of the Regular Army without detriment to its primary function as a fighting force.

Our present resources are :

- I. A Regular Army.
- II. A reserve of all ranks for the Regular Army.
- III. A Territorial Army.
- IV. A reserve of officers for the Territorial Army.
- V. The untrained man-power of Great Britain.
- VI. The settled policy that the whole Army, both Regular and Territorial, is on a territorial organization for recruiting and expansion.

An overhaul of our internal machinery is all that is required in order to make it comply in full with our needs.

The idea on which to base the training of the modern soldier in our peculiar circumstances can scarcely be more clearly expressed than it was in "Educational Training of 1920," Part I, Sect. 1, para. 3, where, referring to Educational Training, it said : "It should continually be borne in mind that its (the Army) component

parts are men, and that each man has character, will, needs and aspiration which routine alone, however perfectly ordered, cannot satisfy, which indeed mere routine may thwart and repress." A system whereby a man throughout his service is condemned to the same yearly routine is too inelastic to bring out individual characteristics, and gives too few opportunities for sufficiently rapid progress in the study of the military art, to produce the required number or standard of leaders.

Routine is necessary for a recruit, and for a soldier until he is a perfectly trained individual, fit to take his place as an integral part of his platoon. After that his individuality and capabilities should be known and made the most of. At this period of his service a man should be classified under one of three distinct categories, namely :

- I. Privates.—Men who will make first-class fighting material when led.
- II. Specialists.—Men who are intelligent enough to be trained into signallers, machine gunners, etc., but who have not the *flair* for leadership.
- III. Leaders.

Category I.—Every platoon owns examples of this type. The higher the standard set for categories II and III, the greater the number who will fall into this category. These are the men for whom it will be necessary to continue the present routine, but it is waste of time to attempt to pile on extra subjects. Make him a master of his trade—a rifleman in the ranks.

Category II.—This class includes signallers, Vickers gunners, scouts, etc. ; men who require a certain amount of education and intelligence. Educate them to the necessary standard, make them masters of their jobs, be it scout or signaller. When they transfer to the reserve, they will be " scout " or " signaller " reservists, and will be re-trained as such whenever the reserve is called up for training. Thus we shall get a real reserve of specialists.

Category III (Leaders).—This is the real problem. In a battalion's establishment there is a chance of promotion of one in six. When re-engagement and extensions of service are taken into account the chances are very greatly reduced, so that the plums for the ambitious are few. The warrant officers and non-commissioned officers allowed in the establishment are the minimum number necessary for the efficient working of the battalion. Each of these must be trained to take over the next higher grade in case of

emergency, and sufficient private soldiers trained to replace the section commanders. This leaves no surplus of trained leaders in case of expansion.

The aim of the scheme outlined below, is to make the best use of all potential leaders, who, to be of value in war, must be trained as such in peace. The scheme in brief is as follows :—

(A) All men classified in Category III (leaders) must attain a certain standard as a soldier ; e.g. 1st class rifle shot and Lewis gunner, a certificate of education, and have passed a regimental test for promotion to lance-corporal.

(B) All present schools to be abolished and amalgamated into a series of central schools (certain technical schools excepted) on the basis of :

- School No. I. To train up to corporal.
 „ II. To train up to sergeant.
 „ III. To train up to subaltern (Sandhurst).
 „ IV. To train up to company commander (J.O.S.).
 „ V. To train up to battalion commander (S.O.S.).
 „ VI. To train up to brigade commander.
 „ VII. To train specially selected officers for the higher commands.

(N.B.—Schools V, VI and VII may be one school with separate courses.)

It will not be necessary for a man or officer to have reached the rank below the one for which he is in training. He must, however, have passed the next school below, and have been reported on by it, and by his C.O. as fit to go forward.

(C) There will be a separate set of schools for the staff, viz. School No. S/I for those officers recommended as likely to make adjutants and 3rd grade Staff Officers.

School No. S/II for 2nd and 1st grade appointments (present Staff College).

School No. S/III for the higher appointments on the staffs of Corps and Armies, etc. (new Imperial Defence College).

The scheme is now considered as it will affect :

(A) Other Ranks ; (B) Officers.

(A) OTHER RANKS

The first difficulty which appears will be that of men in Category III, who have passed for higher rank, keeping up their

work and continuing to learn their work as such, if they serve in the ranks of companies as at present. The solution will be to form a special company, the company *d'élite* of the battalion, in which these men will serve. For simplicity it will be referred to here as "Z" Co., in which platoon commanders and non-commissioned officers will hold acting rank. They will be found in rotation from the men of "Z" Co., who have passed for the required rank. This will have the double advantage of giving opportunities for practice in command, and of inculcating the principle of public school life, of the boys ruling themselves.

To avoid the production of theoretical and unpractical leaders, no man will be eligible to attend School No. I until he has completed three years' service. No man will be allowed to go up for a higher course until he has completed with his unit, one year's service, counting from the date on which last course finished.

The training in "Z" Co. will be a continuation of these courses, but practical. During collective training periods they will serve in the ranks of their parent companies, and be given opportunities of commanding in practice the units which theoretically they have been passed fit to command. This last is most important. It is reports on their aptitude in actual command which will count towards a further advance. What is intended is that these practical reports will outweigh any school report, however good.

In a small war "Z" Co. will be absorbed into the battalion. For a large war, Appendix A at the end most simply explains the system. "Z" Co. is in fact an extension of the training cadre system.

Education must be run on practical and reasonable lines. A distinction between Regimental and Army Certificates is essential.

The main distinction between the Regimental and Army Certificates will be that the former will be entirely utilitarian from the regimental point of view.

The certificate required of a man before entering Sandhurst will embody a more general education. It must, however, be borne in mind that the education received by the soldier through the ranks, and that received by the boy through the public schools, are entirely different. The examinations for entrance to Sandhurst (School No. III) are based on the education imparted. Therefore the examination syllabuses for candidates through the Army, and for those through the public schools will be very different; the former more of a military character, the latter as at present of a literary character.

The next question is inducements. What is required is a body of men, keen to learn, who take the Army as a profession, and who are going to work at their profession voluntarily out of parade hours. Extra pay or allowances are, of course, attractions, and important ones, but there are many other ways to make the scheme attractive, without expense to the State.

(B) OFFICERS

The problem of officers is dealt with under three sub-heads, namely, Commissions, Promotions and Staff.

Commissions.—It is now a settled policy that a certain number of commissions are given to men promoted from the ranks. The present method of selection is extremely haphazard. This is chiefly due to the difficulty of the disparity of age on first commission, and of competing on equal terms as to age with boys from the public schools. The latter is the present normal entry into the commissioned ranks, and the rules governing promotion, etc., are framed for the normal. This scheme is intended to overcome these difficulties, and at the same time to ensure the choice of the men most fitted to hold commissioned rank.

By this system a man will be a recruit for his first year of service ; for his second and third years he will be a trained soldier learning his business as an integral part of his platoon. He is then allowed to attend School No. I, where he remains six months. On completion of this course he returns to "Z" Co. (or fills an N.C.O. vacancy) for a year, after which ($4\frac{1}{2}$ years' service) he goes to School No. II for twelve months, returning on completion once more to his unit for another year. He will now go to School No. III (Sandhurst) for eighteen months, after which he will obtain his first commission.

It must be clearly understood that the above is the case of the really good, hardworking man of brains and personality whom we require for commissions through the ranks. This man has done really well all through, both at the schools and in his unit ; he has been thoroughly tried out, and at each period he has been selected for advancement from many aspirants.

According to this scheme the minimum time in which a man can reach commissioned rank is eight years. The first three years he will be learning to fit himself as a private soldier, and will be of little use to the Army except in that capacity, therefore these three years are deducted, and on commission he is allowed to count

five years' service for all purposes. On the other hand, he will have obtained his education free in the Army, and the Army will have made him what he becomes. Therefore, if he chooses to slack for one or more years, the penalty will be his, as he will not be allowed to count more than five years' service on commission. If he is fitted for and chooses to work to become an officer, is there any reason why his rank service should stand in his way when it comes to commissioned service?

Under existing rules, an officer commissioned from the ranks either loses so much service that he is barred by age from advancement, or is so young when selected for Sandhurst that he cannot be tested properly for his fitness. As a general rule a man enlists at seventeen or eighteen years, so that this scheme will discount the disparity of age and both classes will start about level.

The man from the ranks, having passed through School No. III, is not necessarily chosen for a commission. Without any snobbishness, a man who makes a first-rate non-commissioned officer will not necessarily make a good officer. From those who have completed the course, the requisite number will be selected (*a*) for immediate Commission, to fill the allotted vacancies; (*b*) as qualified to be a platoon commander; (*c*) as qualified to be a Warrant Officer. Those graded (*b*) and (*c*) return to their unit.

Commands.—The principle of the scheme for other ranks is applied with the same object—expansion in war—to officers qualifying for commands. Schools IV to VII are not for ranks but for commands.

The system of passing the courses, although with greater periods of time between each course, will be the same as for the former schools; an officer can go up for a senior course provided he has passed the course below, and has completed the prescribed number of years with his unit thereafter. Graduates will be given every opportunity for practice in the command for which they have qualified.

The officers as a body are keen, and a genuine progressive education which will keep them up to date throughout their service will be welcomed.

Staff.—The staff schools are dealt with in the reverse order to the previous ones, i.e. from the senior downwards. School No. S/III (The New Imperial Defence College) will be limited to selected officers, graduates of School No. S/II with experience of a 1st grade divisional appointment.

School No. S/II is the present Staff College minus the present

entrance examination. The entrance will be from graduates of School No. S/I well recommended after a period of staff employment, and a period with their unit.

School No. S/I is novel. The entry will be by nomination after a qualifying, but not competitive examination. The scope of the course will be to train 3rd grade staff officers and adjutants. The adjutancy is the first step as a staff officer ; to have him trained will be invaluable to a commanding officer, and of great assistance to the brigade staff. Furthermore, a Territorial or Auxiliary Force (India) adjutancy has wider scope than that of a regular unit, and the benefit of such training will be felt all the more in such appointments.

Such is the scheme. It is claimed for it, that it will provide a Regular Army which will be able to mobilize for a war as quickly as under the existing scheme. At the same time it will enable the Regular units of this expeditionary force to draft cadres of trained instructors, leaders, staffs, etc., to assist the mobilization of the nation, without impairing the efficiency of the parent units.

It is estimated that at the outbreak of war each of the 70 battalions at home would produce a cadre of 110 officers and non-commissioned officers ; say 7,000 for the 70 battalions. There will be approximately an equal number distributed abroad. If cavalry and artillery quotas are added *pro rata*, the War Office will have a cadre of 7,000 infantry, 875 cavalry and 1,750 artillery officers and non-commissioned officers *immediately* available to assist the Territorial Army to put on the final polish, and to form the backbone of the new formations. In addition there will be the school staffs, with courses for training officers and non-commissioned officers, actual going concerns. Further complements of unit cadres will be arriving as overseas units mobilize and are transported.

This scheme can be extended to meet the requirements of the Territorial Army, and to solve the problem of the Army in India of how to provide a reserve of British officers for the Indian Army. In this paper only infantry have been dealt with. The scheme, however, applies to all branches of the service.

Those who remember the difficulties of raising the second and third line Territorial units and the New Armies at the beginning of the late Great War, with the accompanying waste of effort and time, owing to the lack of trained *personnel* to deal with the rush of volunteers, will realize of what great value to Great Britain and the Empire such a nucleus will be at the commencement of the next war on a large scale.

APPENDIX A

	War Establishment.	Peace Establishment.	Actual Strength Z-1 Day (a).	On Mobilization.			Actual Strength "Z" Day.	From "Z" Company (e).	From Category 1. Reserve (h).	From Category 2. Reserve (h).
				Sent to Staff.	Sent to Command Formation.	To train New Formations.				
Bn. H.Q. and H.Q. Wing Officers ..	10	9	9	—	(b) 1	—	8	(f) 2	—	—
W.Os. & N.C.Os.	29	29	(g) 29	(c) 1	—	(d) 5	23	6	—	—
Men ..	201	173	163	—	—	—	55	—	—	46
No. 1 Company.										
Officers ..	6	5	5	—	—	1	4	2	—	—
W.Os. & N.C.Os.	15	14	14	—	—	5	9	6	—	—
Men ..	137	122	87	—	—	—	87	—	50	—
No. 2 Company.										
Officers ..	6	5	5	—	—	1	4	2	—	—
W.Os. & N.C.Os.	15	14	14	—	—	5	9	6	—	—
Men ..	137	122	90	—	—	—	90	—	47	—
No. 3 Company.										
Officers ..	6	5	5	1	—	—	4	2	—	—
W.Os. & N.C.Os.	15	14	14	—	—	5	9	6	—	—
Men ..	137	122	97	—	—	—	97	—	40	—
No. 4 Company.										
Officers ..	6	5	5	1	—	—	4	2	—	—
W.Os. & N.C.Os.	15	14	14	—	—	5	9	6	—	—
Men ..	137	122	95	—	—	—	95	—	42	—
"Z" Company.										
Officers ..	..	..	3	(119-40) =			40	—	—	—
W.Os. & N.C.Os. (Staff)	..	..	2					—	—	—
Students ..	..	..	114					—	—	—
Totals ..	..	..	..	110			40			

REMARKS TO APPENDIX A

(a) Arrived at as follows: Officers, W.Os., N.C.Os., as in P.E. Men, deduct (in "Z" Co.) H.Q. Wing 15; No. 1 Co. 30; No. 2 Co. 37; No. 3 Co. 30; No. 4 Co. 22; deduct 5 per cent. of P.E. for unfits, etc.

(b) Say C.O. to raise new brigade.

(c) Say R.S.M. to Staff Captain new brigade.

(d) Specialists.

(e) These are shown as from "Z" Co. They may be promotions from companies, but the vacancies will eventually be filled from "Z" Co. All promotions required on mobilization are included.

(f) Includes Major from "Z" Co. to replace second-in-command, now C.O., see (b).

(g) Excluding Bandmaster.

(h) Reserve Categories: I. Privates; II. Specialists; III. Leaders. All Cat. III, most of Cat. II and balance of Cat. I are at depot brushing up. These include the Reserve of Officers.

Notes.—1. Vide columns 5, 6 and 7, there are 110 Officers, W.Os. and N.C.Os., provided by the battalion to train new formations.

2. The Depot Staff remains at the depot to train replacements for the Regular Battalions.

3. Convalescent Officers, N.C.Os. and other Ranks when passed fit return to the depot, and with the depot training staff are all on a roster for drafts to refill the Regular Battalions.

AN ELIZABETHAN SOLDIER IN IRELAND

BY MAJOR R. H. DEWING

AT the beginning of 1600 Ireland was still in the throes of the third great rebellion which marked Elizabeth's reign.

The Earl of Tyrone's victory over the English at the battle of the Yellow Ford in 1598 had been followed by the disastrous campaign of the Earl of Essex in the following year. Essex had passed to his doom, and Lord Mountjoy had succeeded to the post of Lord Deputy.

Landing in Ireland early in 1600 the new Deputy at once inaugurated a policy of annihilation and devastation which within two years forced the surrender of the great Irish chieftain.

From the pages of a contemporary chronicle of the events of these two years in the Province of Munster the adventures and exploits of a certain English Captain of Foot stand out. They give a picture of the strenuous campaigning which fell to the lot of an Elizabethan soldier in Ireland in those tumultuous days.

Captain George Flower was Sergeant-Major of the Regiment of Foot of which the Lord President of Munster himself was Colonel. The duties of the Sergeant-Major in those days corresponded roughly with those of a modern adjutant, but included in addition the command of a company of his own.

Actually the Regiment seldom seems to have acted together as a whole. More often certain companies were grouped together for a definite operation, dispersing again to scattered garrison duties when that particular fighting was over.

It often happened that the Sergeant-Major by reason of his seniority found himself in command of these grouped companies, frequently with a small detachment of horse in addition.

Not much is said of the organization and equipment of the company. Its paper strength is variously stated as 150 and 100, but reinforcements came rarely enough to Ireland, and casualties and sickness often reduced the numbers of the company to far below even the hundred. The company included both musketeers and pikemen, but in what proportion we are not told.

Owing to the devastated state of the country in which they were

operating, all money, rations and munitions for the forces in Munster had to be shipped out to them from England. So we hear of the arrival at Cork and Limerick in May of "nine thousand pound in monie, three moneths victualls for three thousand Foot, and two hundred and fiftie horse; Also five Lasts of Powder, with Lead and Match proportionably, with two hundred and sixtie nine Quarters of Oates . . . in the same Moneth the Souldiers Summer Suites arrived at Corke."

Biscuits, butter, meat and fish seem to have formed the staple items in the men's rations.

At the time our chronicle opens Munster was in a state of tumult. The previous year the rebels had succeeded in killing the Lord President, Sir Thomas Norris; and two Commissioners were temporarily acting in his office, pending the arrival of Sir George Carew, whom Elizabeth had recently appointed to succeed Norris.

The Queen's forces in Munster at this time numbered 3,000 foot and 250 horse, a strength much inferior to the force the rebels could put into the field. These forces were distributed about the Province as garrisons in the towns and villages, and their situation was none too happy. They could make no pretence to control the country, and even in the towns their security was often threatened by the continual efforts of "Popish Priests, Jesuites and Seminaries" to rouse the inhabitants into action against them.

As a relief from such garrison duty as this Captain Flower must have welcomed orders he received in April to take command of a force of 1,200 foot and 100 horse, which the Commissioners were assembling in Cork. The activities of a certain rebel Florence MacCarty in the district of Carbery, which lies to the West of Kinsale, had grown so aggressive as to necessitate the dispatch of a force to chastise him.

Advancing on Carbery, Flower burned and spoiled the country through which he passed; and though he did not then come to grips with the main rebel force, he must have achieved some minor successes, for he "got the heads of thirty-seven notorious rebels besides others of lesse note."

But the wiles of the Irishman in those days were very much those practised by their descendants three centuries later. Florence MacCarty had collected a force 2,000 strong, and though he had avoided a fight in the open, he was determined that the English should not return to Cork unscathed.

Between Kinsale and Cork there was a ford and a bridge over the

river Owenboy. There, concealed in a glen between two hills on the north of the river, and in some scrub and trees on the south of it, the rebels laid their ambush.

Well content with the devastation they had left behind them, and with little thought of encountering an enemy so near home, the English came marching back towards Cork. Perhaps they were new to this sort of fighting, or perhaps they were just careless ; but their march was disorderly and they had " but a few maches burning."

It would seem to have been by the purest good fortune that one of their officers, Captain John Bostocke, riding well ahead, spied the morians of some of the rebels, and hurried back to give warning.

Despite this warning the troops were still in disorder when the rebels were upon them, and for a moment their rout seemed imminent ; but if Captain Flower had allowed his men to grow slack on the march, he showed himself well able to grapple with this emergency.

Some six or seven hundred yards to the eastward lay a ruined castle, and towards this Flower began to draw off his men. The rebels, pressing hard upon the retreating English, threatened to convert their withdrawal into flight, but Flower was shortly to be even with them. Seeing a dry ditch upon the line of his withdrawal, he directed Lieutenant Lane to take a party of musketeers and lie in concealment there.

Growing bolder and more confident every minute the rebels pressed on. Then suddenly a volley from the hidden musketeers staggered their foremost ranks and, by good fortune, slew several of their leaders. At the same moment the English horse, seizing the opportunity created by the surprise, charged home, while the foot turned about to complete the rout of their late pursuers.

Captain Flower himself had been in the thick of the action, and though he sustained no serious hurt, he had two horses killed under him and received sundry slight wounds from sword and pike.

A few months later Flower was again out operating with a column against the rebels. O'Donnell, one of Tyrone's lieutenants, had come down from the north to harry and raid the country of the Earl of Thomond in County Clare, and Sir George Carew sent his Sergeant-Major with 800 men to help the Earl.

Though this column was only out for a few weeks the work was strenuous while it lasted. They " fought often with the rebel Forces, slew many of them, and never left them untill they had recovered a great part of the Cattle which O'Donnell had taken ; and upon Midsomer day chased him out of Thomond."

No sooner was this affair over than Flower's Company was again on the march, this time with the Lord President who had collected a force for the reduction of the castle of Glynne. This castle lay in the northern part of Kerry, and was the stronghold of a rebel chief known as the Knight of the Valley.

An incident which occurred when the force was a day's march West of Limerick shows the inextricable confusion of the situation which confronted the English, and the impossibility of distinguishing rebels from loyalists among the Irish.

On the 29th of June, Sir George Carew, then at Killinery, received an appeal for help from one Dermond O'Connor, who was besieged by rebel forces in his castle of Balliallan. Anxious to succour a loyal Irishman the English commander decided to move to his relief. The decision had hardly been taken when fresh news arrived. The approach of the English had encouraged the rebels to parley with O'Connor rather than risk the raising of the siege. The upshot of the parley was that within a day of protesting his loyalty to the Queen, Dermond O'Connor threw in his lot with the rebels. The garment of loyalty hung lightly on Irish shoulders, and was always one to be donned or discarded as convenience dictated.

By the 5th of July the President's force was entrenched before the castle of Glynne. The artillery for the bombardment of the castle had been brought by boat from Limerick. The account of how it was mounted exposes the ethics of the English in their Irish wars. "The Ordnance was planted before the Castle, without any resistance, or the losse of any one man, by reason of a Parlie that was purposely to that end entertained, during the which the work was performed."

The guns with which the bombardment had to be carried out must have been mouldering in disuse in some fortress for many years, for when they were due to open fire the "Cannoniere found the Peece to be cloyed," and it was only by the ingenuity of the Lord President himself that the touch hole was eventually cleared.

In spite of their defects the two cannon had effected a breach into the cellar of the great hall of the castle by the eighth.

To Captain Flower was assigned the leading of the assault, a duty which he valiantly performed, gaining the great hall and driving the garrison into the castle beyond. From the hall Flower fought his way up into two turrets above, and there he planted the colours. An ensign and four men were killed in this fighting.

Darkness brought a temporary respite to the survivors of the

garrison, but their plight was desperate for they knew that they could hope for no clemency from their besiegers. With the boldness of despair they made a gallant sortie from the inner castle during the night, and two men actually broke through and escaped, but the rest were driven back by a guard which had been posted to hold the ground gained.

In the morning Flower returned to the assault. The last stronghold of the enemy was a tower to which the only approach was by a narrow stairway only passable by men in file, and protected at the foot by a strong door. The door was first destroyed by burning, a process which delayed the further attack by making the stairway beyond impassable by reason of the smoke. When the smoke had cleared sufficiently, a musketeer, followed by a halberdier, Flower and other officers, mounted the stairs, only to find that the enemy had withdrawn to the roof, determined that there they would sell their lives as dearly as they could.

Thither Flower led the assault, and there ensued upon the gutters and battlements a desperate struggle in the course of which those rebels who were not slain threw themselves over the parapet into the moat below, there to be done to death in cold blood.

Of the English, an ensign and ten men were killed, and twenty-one were wounded. Flower himself had received three or four wounds, and he had well earned the commendation of the chronicler who judged that he had served "admirably well."

For the next twelve months little is heard of Captain Flower. The occasional mention made of him is enough to show that the hard-bitten campaigner was not idle. In October at Lismore he "wrought miracles against the rebels in those parts," and in the following March he was fighting beside Sir John Barkley to prevent a rebel force from crossing the Shannon.

The landing of a Spanish force at Kinsale in the Autumn (1601) brought all the English troops in Munster hurrying to Cork to oppose them.

There had been ample evidence of the probability of such a descent, but in days when letters took weeks to pass between Ireland and England matters moved slowly. When Don John of Aquilla landed his 3,000 men at Kinsale there were in Munster but 1,300 foot and 200 horse to oppose them. It is significant of the difficulties of supply and shipping in those times that reinforcements of 2,000 men, which on the 12th of August were waiting for a favourable wind at their port of embarkation in England, did not arrive at Waterford until the 11th of November.

The Spaniards were disappointed in their hopes of immediate rebel support on their landing, and, lacking the equipment for a march inland, had perforce to content themselves with holding Kinsale.

Thither on the 28th of September George Flower was sent from Cork to reconnoitre their position. The Spaniards did not lack dash, for the moment the English appeared within sight of the town a force moved out to meet them. The English had the better of the resulting skirmish and beat the Spaniards back into the town. It was all Flower could do to prevent his men getting involved among the streets and houses of the town in the excitement of the pursuit.

Bad weather and the non-arrival of ordnance with which to prosecute a siege prevented the English from investing Kinsale for some time. The main work of the troops during this delay was the devastation of the district round the Spanish force. The burning and spoiling of crops and the driving of cattle must have been arts in which our troops in Ireland were by then adepts.

It was not until the 13th of October, three weeks after the landing of the Spaniards, that the English force arrived before Kinsale. It pitched its camp under Knock Robin Hill, half a mile from the town, for even at that date it lacked the ordnance necessary before it could start a siege in earnest.

During the ten days that followed the troops were engaged in a series of exchanges with the garrison, raids and counter-raids, ambushes and sorties. In these episodes Flower's Company took its share, sometimes lying out in ambush all night for an enemy who never came its way, sometimes raiding the enemy trenches, beating a Spanish party back into the town and pursuing them up to the very gate.

At length the arrival of ships with the cannon brought this inconclusive warfare to an end, and on the 23rd the army moved into a camp near Spittle Hill, just beyond musket shot from the town, and prepared for a more serious attack on the Spanish position.

The first operations were directed against an outlying stronghold which the enemy held in Rincorran castle with a garrison of 150 men. Against this castle two culverins were mounted, but they seem to have been as decrepit as the ordnance previously used against the castle of Glynne.

The initial mounting of the cannon was much delayed, "so ill was everything fitted, by reason there had been no use of them for a long time." Even when mounted their opening shots were far

from auspicious, for with the firing of but two or three rounds "the carriage of the better culvering brake, and about two of the clock in the afternoon the other received a flawe."

Another piece, a demi-culverin, which was shortly mounted beside the first two, proved to be in no better condition, for within the firing of but a few shots she "brake her Axel tree." By using such sound parts as could be selected from these shaky weapons a battery of three guns was eventually got into action, and thereafter they seem to have functioned successfully.

Meanwhile, the Spaniards were not content to remain inactive. They brought a gun out of the town and proceeded to shell the English camp. They killed a few men, but in the eyes of the chronicler achieved an even greater success when they "brake two hogsheads of the Lord Deputies beere."

By the end of October a breach had been made in the walls of the castle, and a bold sortie from the town in an attempt to relieve the garrison at Rincorran having failed, the castle was surrendered.

The next step against the Spaniards was to be the capture of another outlying work, castle Ny Parke, which stood on a headland lying south of the town of Kinsale and separated from it by an arm of the harbour.

While preparations for the reduction of this castle were being made news of the approach of strong rebel forces from the north under Tyrone forced the English to detach a force under Sir George Carew to meet them.

This weakening of the besieging force encouraged the Spaniards to more active efforts, and the days following their departure were marked by continual sallies from the town. In the middle of November the arrival of an English Fleet bringing the long-expected reinforcements gave the besiegers a definite superiority over the Spanish force, and the attack on castle Ny Parke was pushed on.

Foul weather hampered the preparations, but a great effort was made to mark the 17th of the month, the anniversary of the Queen's Coronation, "which wee meant to have solemnized with some extraordinary Adventure." It fell to Captain Flower with his own and other companies to conduct this affair.

Under cover of darkness he landed with 400 men to attempt to breach the castle walls by digging. Armed with picks they succeeded in reaching the walls and set to work. The working party was to be protected from the enemy on the ramparts above them by an "engine," which must have been designed to form a roof over their heads while they worked; but this, like the English ordnance,

seems to have been defective. The Spaniards defeated the attack by the primitive method of throwing down stones and boulders upon the heads of the diggers, and the "engine" proved unequal to its task. With its collapse the attempt had to be abandoned, and the raiders were drawn off having suffered some small loss without achieving anything.

A few days later castle Ny Parke fell, and in December the operations at Kinsale drew on to their climax.

Sir George Carew's force rejoined the besiegers a few days before Tyrone's army reached the neighbourhood of Kinsale. The President's attempt to prevent the advance of the rebel force had been frustrated by an unexpected frost which had given Tyrone the opportunity of eluding his enemy by a forced march over the Slewphelin Mountains, which in normal weather were such a mass of bog and swamp as to be quite impassable even for the light-footed Irish.

The arrival of the rebel force within a few miles of the town encouraged the Spaniards to the most vigorous efforts to raise the siege. Flower's company was at this time, with others, holding a small fort which had been established on a hill to the west of the town within "lesse than half caliver's shot from the walls."

Here in the first week in December they met the most determined sortie attempted by the Spaniards. About eight o'clock in the evening 2,000 men sallied from the town, armed with tools of various sorts with which to pull down the gabions and trenches and to spike the guns of the battery which the fort had been designed to protect.

In spite of a counter-attack from the English camp, the Spaniards continued their attack on the trenches held by Flower's men. At length he got his men up from their trenches and advanced to drive back the enemy immediately in front of him; but no sooner had he vacated his trenches than another party of enemy came in from a flank and occupied them behind him.

Severe and bitter fighting continued far into the night before the Spanish attack was finally beaten off. The Spanish casualties were reckoned at 200 in this night's fighting, and the English also suffered heavily. Flower was again wounded, and his lieutenant was killed.

Perhaps this wound proved more serious than those he had previously suffered, for no more is heard of Captain Flower until after the rebel forces of Tyrone had been defeated and driven north again in disorder, and Don John of Aquilla had signed a capitulation

by which, in return for safe conveyance back to Spain, he undertook that neither he nor his troops would bear arms against the Queen of England again.

With the surrender of the Spaniards and the rout of Tyrone the most serious fighting was over. In January Captain Flower was dispatched to go by sea to take over the castle of Dunboy from a small Spanish garrison which had been holding it. If this duty sounded like a pleasure cruise to men who had been on the march or in the trenches continuously for many months past, it actually proved something very different. Coasting round by Baltimore to Bearhaven in a hoy of 120 tons, they encountered such bad weather that they could not enter Bearhaven at all, and were forced to turn back. On the way both soldiers and crew were stricken with some epidemic which wrought more havoc among them than all the fighting of the past months.

During the short cruise fifty soldiers died of disease, and only seven of the crew survived. Though nominally the strength of the companies on this expedition was 200, their actual numbers were much below this figure, so that the percentage loss was enormous.

On his return from this expedition Flower was sent with a small force to occupy a post in the neighbourhood of Bantry where disorder was still rife. In March a column was operating in this country with orders "to burne the rebels corne . . . take their Cowes, and to use all hostile prosecutions upon the persons of the people as in such cases of rebellion is accustomed."

Active operations continued for yet another twelve months before the embers of rebellion were stamped out. From Bantry Flower accompanied the Lord President to Bearhaven, where that castle of Dunboy which he had failed to reach in January had fallen into the hands of rebel Irish. The siege and capture of this castle, which had the reputation of being impregnable, occupied their energies till the end of June.

A little later on we find Flower reducing another stronghold, the castle of Mocrumpe, which, though only sixteen miles from Cork, was so surrounded by woods and bogs that it required an "army" and the use of sap and mine to compass its fall.

In October he was with Sir Samuel Bagnall among the wastes and bogs of the Muskerry Mountains, attempting to capture a fugitive rebel named Tirrell. Though the chief rebel himself ran away in his shirt, and his wife followed no better clothed, the spoil captured was so rich as easily to console the English soldiery for missing their human prey. "Our men got fifty horses and hacknies,

one thousand cowes, sheep and garrans, great store of Armes and baggage, and that which seldome hath beene seene in Irish spoyles, some remnants of Velvet, Holland, Gold and silver Lace, English apparell of Satten and Velvet, and some quantitie of Spanish coyne."

In November Flower was again about Bantry and Baltimore, "leaving neither Corne nor Horne nor House unburnt."

At the end of the same month he was guilty of an act of brutality which is only too typical of the way in which the English conducted these Irish wars. He happened to have in his hands an Irish rebel named Donnell Dorrogh, whose brother was holding the castle of Cloghan, where a Popish priest who had lately come from Rome had taken shelter.

Flower saw in his prisoner a means whereby he might force the surrender of this priest. Encamping his company before the castle, he offered its commander the alternatives of surrendering his castle and the priest, or seeing his own brother hanged before his eyes. To the credit of the Irishman who was faced with this brutal dilemma, Flower was met with a blank refusal to yield the castle; whereupon the Englishman fulfilled his threat, and hanged Donnell Dorrogh in cold blood in full sight of the garrison of the castle.

Four days later the castle was surrendered, but Flower found himself baulked of his chief prey, for the priest had been smuggled out of the castle in the meantime.

Our chronicle closes with the departure of Sir George Carew to England early in 1603, but it leaves the indefatigable George Flower still busy with sieges and destruction in the county of Cork. The curtain falls with his capture of the castle of Kilcow, "a place of great strength, and the only castle in Carbery that still held out in rebellion."

NOTES ON FOREIGN WAR BOOKS

THE Second Part of the German Official Monograph on the battle of the Marne, 1914, is reviewed, with a map, in a separate article. By far the most interesting book of the quarter is General Hunter Liggett's "A.E.F. Ten Years Ago in France." Commandant Koeltz's *L'Offensive Allemande de 1918* is a very valuable summary, and Prince Max of Baden's memoirs deserve attention. The French Official Account of the Dardanelles Campaign is dealt with elsewhere.

WESTERN FRONT

The modest title of "A.E.F. Ten Years Ago in France" (New York, Dodd, Mead & Co., \$3), by Major-General Hunter Liggett, may lead to its being overlooked. But this would be a great misfortune ; for it is one of the best war books that has been written.

General Liggett was one of the two American generals whose characters were sketched by Captain Liddell Hart in his "Reputations" and was therein summed up as "student of war—and human nature." He commanded the 41st Division in the Château-Thierry offensive of the 18th of July, the I Corps in the Argonne fighting, and the First Army in the final advance, and eventually the American Army of Occupation.

The book is essentially the story of his own experiences and the operations of the troops under his command, but those of the whole A.E.F. and of the Allies on the Western Front from first to last are given in such clear outline as to present a fairly complete picture. Written with great military knowledge and extraordinary balance, it describes in true proportion the part taken in the war by the American troops. More interesting even than the historical narrative are the author's comments on men and things—which fully justify Captain Liddell Hart's estimate of him.

One is tempted to quote many of his phrases ; but the reader will find something worth thinking about on almost every page. He begins :

"There was glory enough to go around in the final victory. No one of the Allies—and yet each one—won the war. France and Russia put

most men into the field, shed the most blood, but Great Britain saved them in 1914 with her control of the sea and a small army, and thereafter bore an increasing share of the burden. Italy probably saved the day in 1915 by her entry on the Allied side; certainly if Italy had joined her former allies, Germany and Austria, France would have been hard put to it to defend another frontier. Perhaps Rumania feels that she saved the day in 1916 by her entry on the Allied side. Yet with the collapse of Russia in 1917, the day had to be saved again."

He is of opinion that

"it was the 200,000 men we had ready on July 18th [1918], and they only, that permitted Foch to strike back and wrest the initiative from the enemy. It was these men and more than 1,000,000 more in the same uniform that enabled Foch to retain the initiative."

Yet he declines to claim everything for the A.E.F. :

"Ours was the green army of an unprepared people, but veteran Allies were able to supply many of our deficiencies of material and training. . . . Except for Admiral Plunkett's naval guns and twenty-four 4.7" heavy field guns in General R. P. Davis's brigade of Corps Artillery, serving with the French XVII Corps east of the Meuse, no field piece of American manufacture manned by Americans ever did fire a shot at the Front. With these exceptions, our artillery was purchased from the French, who lent us many batteries of their own as well."

He adds later, speaking of the September offensive, the first made by a definitely American Army :

"It was nineteen months since we declared war, sixteen and a little more since our First Division debarked in France. That was good time, and I hope the American people may remember it when some one next speaks of 1,000,000 free-born Americans leaping to arms overnight; remember, too, that we had bought most of our material from our Allies and that the British had transported much of our army because we lacked ships."

He gives due weight to the splendid fighting of the American divisions and the heavy casualties incurred. Where

"the French preferred to take a position in half a day at small cost, the impatient young man from afar carried it in fifteen minutes, and paid the price. . . . The American Army endlessly took chances that no French soldier in his right mind would have chanced; nor would our men had they been fighting since 1914."

For

"The courage of our young army was not always wise. . . . Courage is sometimes the only substitute for the skill that comes of experience. It is a fearful price to pay, and we have always paid it in our wars."

And he adds :

"As one who is proud of what the American Army did, I wonder what we might have done against the German Army of 1914? Not so well."

He points out that the Somme did more than break the German moral :

"Had the great German attack that was to come in March, 1918, been launched from the old position rather than from the Hindenburg Line to which the enemy had retreated in March, 1917, the Germans would have been in Amiens. . . . That retreat caused by the British successes on the Somme in 1916 may well have saved the Allies from defeat in 1918, before we could aid them in force."

He understands Passchendaele :

"They [the British] paid more for it than they could afford, more than it was worth in itself, but they had no choice. They had to ding-dong away, for Italy was all but out of the fighting and the French were just returning to it."

The failure of Nivelle's offensive

"left the British to bear the brunt of the war in the West for most of the year. They battled through Flanders all the summer to such effect that the Germans were unable to exploit the near *débâcle* of the French."

"The dogged cheerfulness of the British soldier was the most heartening symptom of the Allied cause that I saw in France in 1917. . . . Nothing that I had read—and I had read everything to which I could lay hand—nothing I had seen of our own celebrated Virginia clay, prepared me for the unbelievable ground over which the British were fighting."

Of March, 1918, General Liggett writes :

"Why the gallant and able Gough was ever blamed, I do not yet understand. He was not so blamed by his chief, but by the civil authorities, who kept an Army in England to repel a mythical invasion and other Armies in the Near East for political reasons. Had Haig been given the reinforcements he pleaded for, Gough would have parried the German blow as Byng parried it, and the first of an ominous series of Allies' crises would have been avoided." However, he adds, "the British are at their best in disaster."

He gives Haig full credit for his decision to attack the Hindenburg Line in September, 1918, after receiving the extraordinary telegram from the Chief of the Imperial General Staff that the Government would take it ill if he had heavy losses :

"The war could not have been won in 1918, in all likelihood, had not Sir Douglas Haig been willing to take on his own individual shoulders a responsibility which his Government refused to accept. . . . A plausible case may be made out for the Lloyd George theory [to get at Germany

through Turkey, Bulgaria and Austria], but any one who believes that Germany would have quit had her Armies not been smashed back and back by an irresistible foe in October and November has only to read the history of these two months and examine the German attitude after the Armistice. Had her Army been intact she would have retired within her borders and bargained indefinitely for terms."

The Argonne fighting is brought into just proportion :

"When an American speaks of the battle that opened on Sept. 26th, he calls it 'the Argonne.' In reality, a very small part of our army fought in the Argonne, but the struggle for the terrible wood was so long, so costly and so important to the result as a whole, that it overshadowed the rest of the battle in the popular mind."

As General Liggett's I Corps attacked in the forest, he is fully qualified to describe the operation, which he does in some detail beginning : "The region was a natural fortress besides which the Virginia Wilderness in which Grant and Lee fought was a park." Incidentally, he mentions that the one negro regiment with him "twice ran away under shell fire in the battle," and was utilized for road-making. When he went up to the front,

"there was an infernal din going on, and 100,000 men were trying to kill each other within close vision of a normal eye, and yet, as came to be the case often in this war, not a living soul was visible to us."

There are good descriptions of the doings of the "lost battalion," cut off for several days, surrounded by Germans, but eventually rescued ; of Corporal York—

"second elder in a mountain sect of the Church of Christ and Christian Union . . . near the Tennessee—Kentucky line, a magnificent shot, who killed and captured, almost unaided, an entire German machine-gun battalion, bringing in 132 prisoners " ;

and of the incident of a certain American division trying to slip into Sedan across the front of the French. General Liggett says : "This was the only occasion in the war when I lost my temper completely."

Many of his *obiter dicta* are worth preserving. He admits that he was a "large man" and there was some question as to whether he should go to France. He remarks :

"Unquestionably there is such a thing not only as being too old to fight, but too fat. That disqualification is the more serious if the fat is above the collar. . . . Only youth and physical prime can meet the full impact of modern war. . . . I let chances go which I should have accepted had I been 45 or younger. The body weakens on the spirit, and a man grows more cautious with age."

"High executive ability is rare in any walk of life ; it is a gift rather than an acquirement."

"Purely military competence in the higher ranks seldom can be tested adequately except under battle conditions."

He believes in

"a thing that is called 'military reputation' in the Army—the composite of an officer's personality, industry, ability at the tasks assigned to him in the past, and the sum of his record. The unofficial verdict, by general report among his fellows is good, indifferent or bad, and it rarely errs."

"War grows more devilish progressively, but it remained for this one to add anonymity to injury."

"You cannot fight war on certainties."

And apropos that events may possibly have gone differently if some other strategy had been followed, he says :

"Such hindsight strategy is interesting, but never important. . . . War is a succession of lost opportunities on both sides, as all great wars have been, and will continue to be, but to go behind the returns is the equivalent of a post-mortem on a card game."

"War provokes more muddled thinking that any human activity I know of."

"I am under no patriotic illusion that one good American can whip any ten foreigners. I know, on the contrary, that one well-trained, well-led foreigner is much more likely to whip ten good but untrained Americans."

"It is always possible to misinterpret a written order, either as to what is expected of you or your neighbour."

"The old spirit of competitive local pride is the easiest and best stimulant of army esprit de corps, and such armies as the British always have fostered it in every way. Every British regiment has a family tree, as long and as zealously honoured as a noble lord's."

As regards mechanical contrivances in war, he says : "Many were of enormous assistance to the infantry man, but none or all could replace him." The French tanks he saw in action "were knocked out by direct hits by enemy field guns firing from open sights."

He "never got over the manure pile that is the brightest jewel of the French peasant's farmyard" ; nor "French tobacco, which is not among the beauties of the republic." He regrets his ignorance of the French language, commenting : "I never have known another study that would give equal returns for the same expenditure of mental energy as languages."

He could never trust the Germans :

"In success the enemy had been unscrupulous ; in defeat he would have the less reason to be unduly concerned with rules. . . . We were suspicious to the last, with good cause, of the enemy's good faith."

He defends fighting up to the last moment :

" We went into battle knowing that the terms of the Armistice were being discussed with higher authority, but with no assurance that the enemy would accept these terms in the few hours that remained before the offer would expire. Fighting was our concern, and our only concern, until we were ordered to stop."

The book is illustrated with excellent photographs, but might with advantage be provided with more maps.

" *Without Censor : New Light on our Greatest War Battles.*" By Thomas M. Johnson. (The Bobbs-Merrill Company, Indianapolis. \$5.00.)—If the title of this book leads the American reader to expect some sensational disclosures he will be disappointed ; but he will be able to revel in the glorification of American arms. We have our own journalists who fretted against the censorship : to them the national military prestige appears to be worthy of no consideration. On the other hand, Mr. Johnson, who was with the American Armies, in 1917 and 1918, as special correspondent of *The New York Sun*, feels that it is essential to " tell the world " how American achievements dominated the efforts of the other Allies during the closing phases of the World War. In doing this he has neither avoided personalities nor eschewed highly controversial matters. He allows little credit to the French and British for their part in the series of battles which accomplished the final victory : for instance, he clearly implies that two American divisions formed the spearhead of the British attack which broke the Hindenburg Line about Cambrai.

Mr. Johnson devotes considerable space to describing General Pershing's difficulties with the French and British before it was agreed that his forces should operate as a united American command. He laments that the battle of St. Mihiel was broken off so soon. He tells us that General Pershing rightly preferred an advance over the Woëvre plain towards Metz to the arduous Meuse-Argonne operations which he carried out at the wish of Marshal Foch.

The illustrations are numerous and excellent, and there is some good writing in the book which owes much to the author's consultation with many American officers and journalists ; but to get Mr. Johnson in the right perspective it is necessary to read General Hunter Liggett and General R. L. Bullard.

Le Manovre iniziali in Alsazia e in Lorena (Agosto-Settembre, 1914)—The opening Operations in Alsace and Lorraine (August–September, 1914)—by Generale Roberto Segre (Bologna, Zanichelli, 60 lire), contains a very complete account of this opening phase of the campaign, with comments. The main French offensive was to be preceded by a thrust from Belfort and the Schlucht into Upper Alsace directed on Mulhausen and Colmar, with the ultimate object of the destruction of the German station at Bâle and all the bridges, existing or under construction, over the Rhine from Bâle to Neuenberg. The execution was entrusted to a single corps, the VII of the French First Army (Dubail). General Segre thinks that one corps was insufficient for the purpose; although General Dubail has been accused of rushing on Mulhausen without duly considering the risks, it now appears that he considered the operation “delicate and hazardous.” He thought that the corps might be able to reach Colmar, but to continue the task it must be reinforced, and, in view of his main offensive, he could not spare troops for this. General Joffre, on the other hand, wished the VII Corps to push on quickly, as, he said, it had nothing in front of it. At the opening of the operations this was true; but the Germans soon brought up reinforcements and counter-attacked, and the corps was driven back; and then Joffre employed larger forces and formed an Army of Alsace, under General Pau, to repeat the thrust. This was successful and reached the Rhine. But the main operation at Morhange and Saarburg—which is described—having failed, the success of the Alsace attacks was of no value or use.

There are chapters on the German attack on Nancy, and on the arrangements made before the war for the Italians to send their Third Army to the Rhine, and a final one on the lessons of the campaign.

There is an excellent bibliography of French and German books on the campaign, and there are ten maps.

Operative und taktische Aufgaben zum Studium des Marnefeldzuges, 1914, Heft 2 (Strategical and Tactical Problems for the Study of the Marne Campaign, 1914, Part II), by Colonel Constantin Hierl, deals with the leading of the German First Army in the period from the evening of the 29th of August to the evening of the 30th of August. Like Part I, which was concerned with the German Third Army, reviewed in October, 1927, the problems contain a veiled criticism of the German leaders. The book has a special value as the information available in 1914, which is given, is vouched for by General von Kuhl, Kluck's Chief of the Staff.

The first problem set is an appreciation of the situation on the evening of the 29th of August, when Kluck had to decide whether he would continue his own advance south-west towards the Lower Seine, as ordered by the Supreme Command, or go to the assistance of the Second Army, which was in difficulties at the battle of Guise. The solution is given with the necessary operation orders and report to the Supreme Command.

The information brings out that, "as regards the direction of retreat of the British army, which was supposed to be badly shattered by the defeats it had suffered, there was no full clearness (*sic*). The available reports indicated a retreat by St. Quentin and Guise in a south-westerly (*sic*) direction." The only definite information was that there was "an obviously British" brigade at Noyon, and that the Second Army was engaged "in a serious battle with an apparently superior enemy," and had reported "the fighting extraordinary heavy and the situation as serious (*ernst*)."

What had to be done, says Colonel Hierl, "depended on the behaviour of the British," a factor quite neglected in August, 1914, and Kluck should not have moved his whole Army to assist the Second Army, but sent only one corps, the IX, using the remainder for a wide sweep between Somme and Avre to envelop the left flank of the main French Army, "inclusive or exclusive of the British Army," a far more comprehensive movement than the Germans actually carried out, which ignored the British Expeditionary Force and Maunoury's Army.

Further problems deal with the situation at 8 a.m., 11 a.m., 2.30 p.m. and 9 p.m. on the 30th of August. It is interesting to find that even an "ordinary victory" is not claimed at Guise, as was done in the German official monograph on the battle. The information provided is, "whether the enemy in the battle St. Quentin—Guise was forcibly compelled to leave the field by the Second Army, or evacuated it by order as a result of the general situation, is not known."

In the orders on the evening of the 30th, Colonel Hierl would send the First Army south, left flank on Villers Cotterets, instead of south-east over the Oise between Compiègne—Chauny as it actually went. That is, the German critic of to-day would alter Kluck's orders so as to include the British in his enveloping movement. A sincere compliment, perhaps. But Kluck in 1914 never knew where the British Army was, and when he met half of it on two occasions, thought he had met the whole, whereas the critic of to-day is in possession of the fullest details of the B.E.F.

L'Offensive Allemande de 1918. Les Conditions Politiques et Militaires (Paris, Alfred Costes, 6 francs), by Commandant Koeltz de l'Etat-major de l'Armée, is an extraordinary good summary of the causes of the German failure as revealed by German publications. The compiler gives chapter and verse for his statements by reference to the publications—all those he mentions have been reviewed from time to time in these pages. His earlier chapters : on the German aims, on the question of whether there should be an offensive or not, on where the attack should be made, and its extent, the resources in men and material available, contain nothing new although they are a most convenient résumé. But his concluding chapters on "moral and discipline" and value of the German Army are of great interest. He shows from the statements of German military writers that the Army on the Western Front in March, 1918, in spite of the trials of 1917 had still an excellent moral and that the troops who attacked were particularly well trained and animated by a very good spirit. "Besides, this was proved by the brilliant results which they obtained." This moral, however, was not common to all the front formations, the lines of communication troops and the homeland, and in this fact lay the weakness of the Germans.

The maintenance of the high moral of the divisions of attack was due partly to the successes at Riga, Zloczow (defeat of the Kerenski offensive) and Caporetto, obtained easily and without great losses, and partly to the hope of a victory in France at a single blow, which would force the Allies to demand peace and end the miseries of the war. If an instant success were not obtained, the moral of the troops thus disillusioned would inevitably fall.

As the author of *Kritik des Weltkrieges* has written : "When a great attack from which something decisive is expected fails hopelessly with heavy losses, the cohesion of an army is more shaken than by an unsuccessful defensive battle." Moral would fall the quicker the more the divisions were compelled to absorb reinforcements to replace losses, drawn from the dépôts at the front and in the homeland, and less disciplined, less well trained and less experienced than those of the selected divisions. "Position divisions," too, of inferior troops used to hold quiet fronts, and divisions brought from Russia, ignorant of the methods of fighting on the Western Front and in fear of its severity, would have to be employed.

The moral of the reinforcements, it is shown, had already been affected by revolutionary, pacifist and anti-military propaganda, not a little assisted by the attitude of the new class of officer and non-

commissioned officer, who with more than the arrogance of the old professional class had little or none of its military knowledge or ability. At least as early as November, 1917, the Supreme Command had to issue secret orders—the circular is given—for dealing with the increase in the number of cases of refusal to obey orders and of desertion.

In view of this state of affairs the offensive of March, 1918, was really a greater gamble than appears at first sight ; for all depended on an immediate success and a signal one.

As regards numbers, there were two masses of unequal value ; one the 56 divisions of attack, the other the 136 divisions of position incompletely equipped and of doubtful mobility. Although the Germans had a slight advantage as regards the number of divisions, in point of number of combatants the two belligerents were about equal. Want of men was the more serious weakness. Too large a proportion of men fit for service were employed on the manufacture of war materials—of which there was no lack, indeed a “surproduction.” There were 3,500,000 men on the Western Front, of whom about 2,000,000 were combatants ; 2,424,000, of whom 1,187,000 were fit for war service, were excused military service for duty in the factories. “Material is useless, if one fine day men are lacking.”

BALKANS

M. Robert David, at one time *chef de cabinet* to the governor-general of Algeria, a deputy and under-secretary of state, is the author of *Le Drame Ignoré de l'Armée d'Orient* (Paris, Librairie Plon, 25 francs). As the title implies, he seeks further recognition of the services rendered by the French forces sent to the Ægean ; and, as a confirmed “Easterner,” he holds that a properly staged Allied advance from Salonika in 1916 might have reached the Danube, and thereby shortened the war by at least a year. Incidentally, he is by no means tender of British susceptibilities.

Given a Commission in the supply service, M. David went with the second French division (156th) to the Dardanelles. His chief criticism of the campaign is that the Allies should have operated on both sides of the Straits : probably the opinion of most Frenchmen who spent months at Sedd el Bahr under the fire of the guns on the Asiatic shore.

The author left Gallipoli with the 156th Division, and was busy with supply arrangements at Salonika during October and November, 1915. After the French advanced to Strumitza, he was selected to

form a big supply dépôt at Cueycueli. About this time General Pellé wrote to him from G.Q.G. in France emphasizing the necessity for prompt and energetic measures in Macedonia—" *Nous autres Français avons fait tout ce que nous avons pu* "—regretting the infirmity of purpose common to all coalitions, and deploring the inaction of France's Allies. A description of the Franco-British withdrawal consequent upon the collapse of Serbian resistance is followed by a tribute to M. Briand's unwavering policy with regard to Macedonia—it was not to bear fruit until 1917—contrasted with the vacillations of *les Anglais*. French prestige, it is stated, was much enhanced by the presence of General Sarrail's Army at Salonika, and relations with the Greek authorities there were good; but a succession of "incidents," due to the anti-*Entente* attitude of the Hellenic Government, soon called for strong diplomatic action. M. David wrote to M. Briand giving his views of the situation, and in the spring of 1916 himself returned to Paris, where, having friends in high places, he was able to state the case in person. He also had interviews with M. Poincaré and with Generals Joffre, de Castelnau and Pellé at Chantilly. He claims that it was at his suggestion—albeit not till a year after—that M. Jonnart was sent to Athens as ambassador with special powers. At this point the "Eastern" argument is developed in full.

The great need was to force the abdication of King Constantine, whose duplicity, M. David thinks, was not realized by the *Entente*. Though an offensive had been demanded of General Sarrail to relieve the pressure on Verdun, nothing could be attempted in Macedonia. The British are accused of further dissembling, and it is asserted that General Mahon, being suspected of too complete an understanding with Sarrail, was replaced by General Milne! It was not until the end of August, 1916, when Rumania entered the war, that the Allied forces advanced to a line from the Struma to Florian.

Nearly a third of the book is occupied with an account of French diplomatic action at Athens during the latter half of 1916, and throughout the following year. Being able to render valuable service by reason of his pre-war knowledge of Greece and his friendship with several of her prominent politicians, M. David was attached to M. Jonnart's mission and assisted in the *pourparlers*. Great Britain is represented as too much preoccupied at first with Mesopotamia and the safety of the Suez Canal to cooperate wholeheartedly with France in her endeavour to secure the abdication. General Sarrail, whose political friends were not those of M. David, is praised for his purely military qualities, but had *peu de souplesse*

for the difficulties of his task. He is said to have been unpopular with the British, Italians and Serbs. His successor, General Guillaumat, who arrived when Rumania was defeated and Russia out of the war, is credited with the conversion of the reinforced Salonika Army into a real striking force and with re-establishing harmony between the Allied contingents. However, we are told that the German success of May, 1918, demanded a second Galliéni for the defence of Paris, and M. Clemenceau chose General Guillaumat. So we come to General Franchet d'Espérey, and his successful offensive launched in the autumn of 1918. The narrative of these operations is summarized into a few pages.

Complaint is made that, after the downfall of Bulgaria and Turkey, Great Britain took it upon herself to negotiate the armistice with the Ottoman Power to the detriment of legitimate French interests in the Near East. M. David also regrets that, owing to the French Government's lack of vision, the terms of the Armistice of the 11th of November, 1918, prevented an advance from Serbia to Budapest, Vienna, Prague and Dresden. His concluding chapter, written after a lengthy post-war visit to the Near East, emphasizes his country's Mediterranean responsibilities in the face of a re-awakening Asia.

RAILWAYS

Les Chemins de fer allemands et la Guerre (Paris, Charles-Lavauzelle, 16 francs), by Marcel Peschaud, *Secrétaire du Comité de Direction des grands réseaux de Chemins de Fer français*, a book of 330 pages with two maps, is a most useful summary of the history of the German railways, not only during the war, but before and after it.

Moltke the elder once said that he preferred spending money on the construction of railways rather than on fortresses ; for " an extra railway traversing the country makes two days' difference in the assembly of an Army, and gives operations that much start." Ever since then Germany has been endeavouring to obey his precept.

The operation of the railways during the early part of the war has been dealt with in the German official history,* so need not be referred to again here, and we may pass to the other subjects. The first railways in the various German States were built by private enterprise, but under Moltke's influence purchase of them by the

* Reviewed in the *Army Quarterly*, April, 1928.

State was begun in Prussia. There have been three headings of policy :

(1) The progressive purchase of all lines exploited by private companies, in order to ensure for the whole railway system complete unity of management.

(2) The consolidation of Government influence and military authority on the railways.

(3) The effective preparation of the railways for war.

Owing to the jealousies of the various States, Bismarck was unable to effect the consolidation of all the railways under Imperial control ; all he could arrange was that the trucks should be in common, and that in their constitution the railways were submitted to the surveillance and legislation of the Empire. " Defence " lines were built at the cost of the Empire. By the year 1900 all the private railways had been bought up, and the German railways were under eight administrations working with uniform rules. It was not until the National Assembly at Weimar in 1919 that railways, with canals, motor transport, aviation and construction of roads were legally made an Imperial matter, the change of hands to be effected by the 1st of April, 1921.

There is no space here to notice the German railway policy on the various frontiers, but it will be as well to recall one " defensive " measure, which should have given the French General Staff a clue. That is the extension of lines to the Belgian frontier, including in 1896 the Aix la Chapelle—Trois Vierges (Uffingen) section parallel to the frontier ; and, still more significant, the construction at tiny village stations of enormous sidings and other installations required for large troop movements.

Whilst German accounts speak of four double lines from east to west across Germany, M. Peschaud states there were six, and calculates that six corps of 40,000 men each could be transported from the Russian to the French frontier in a week, including preliminary preparations. He also charges Germany, on the strength of her own official railway statistics subsequently published by the Minister of Transport, of misinforming the Allies as to the amount of rolling stock available for reparation purposes. In November, 1918, it was stated that she had 700,000 vehicles ; according to the official report she had 851,482.

There is an interesting account of the " transport crisis " which began in the winter months of 1915, and continued, with particular intensity in the last months of the war. It was not due to lack of rolling stock, but to the difficulties in getting it to the places where it

was wanted for the transport of the autumn harvest. A most serious crisis came in the next autumn, 1916, when, in addition to other burdens on the railways, Rumania entered the war and the Hindenburg munition-construction programme was initiated. An enormous increase of traffic took place, whilst at the same time large numbers of railway *personnel* were withdrawn for munition work. A "stagnation" or "congelation" of railway services spread over Germany. All sorts of measures were devised in December, 1916, to conquer it: restriction of passenger movement, limitation of ordinary trains, reduction of traffic of articles not absolutely indispensable for the conduct of the war (e.g. baths, beds, carriages, pianos), employment of canals, better organization of unloading, control of routes.

In 1917 the crisis became aggravated, and the weight to be carried by a single truck was put up from 15 to 17½ tons, and orders were issued that merchandise must as far as possible be moved by light railways and tramways. This brought temporary alleviation. The Minister of Transport has not hesitated to say that "the gigantic effort demanded of German industry and production was out of proportion to the capacity of railway transport and existing installations." Ludendorff's *Urkunden des Obersten Heeresleitung*, 1916-18, contains many documents which show the tremendous difficulties encountered in moving raw material and stores, even coal.

Lack of labour for loading and unloading was another serious factor, and dealt with locally by commandeering women and young people.

Various new offices of control were created and finally a "General Traffic Office" (*General Verkehrsamt*) replaced them, with virtually dictatorial powers.

It would appear that the mobilization of the railway *personnel*—of the Prussian railways 145,000 men, that is, 25 per cent.—was not without influence on the railway troubles. "Bad food, war cares, two epidemics of influenza in June and October, 1918," greatly hindered the service. There was never a railway strike, although in a few workshops there was a partial cessation of work.

In these days of demands for State ownership it is of interest to note that in the four years before the war the percentages earned on the capital expended on the German railways as a whole—without allowance for interest on loans or for sinking fund, which varied in the different States from 0·60 to 1·50 per cent.—were 5·85, 6·54, 6·43 and 5·82.

GENERAL

The "Memoirs of Prince Max of Baden," the German Chancellor for the last six weeks of the war, available in an English translation (Constable : two volumes, 42s.), are mainly of value to those interested in German mentality.

The Prince is a kind of German Sir Oswald Mosley, of good family but socialist tendencies, so much so that on his father's death he did not assume, and has not so far assumed, the family title of Grand Duke.

This book when examined turns out to be special pleading and skilful propaganda directed against the Allies, sandwiched in between personal reminiscences, and an account of the last days of the German Empire in which little that is new appears. The whole is dashed with evident dislike of the Supreme Command. It begins with a piteous claim to be heard on account of his good work done for the prisoners of war. The British prisoners of war should be heard in regard to this. War guilt is, of course, discussed with the following summing-up :—

"The charge that the German military party deliberately unchained the world war need have no terrors for us to-day, now that we know that Moltke, Chief of the General Staff, was at heart a pacifist, without confidence in his own capacity and without faith in Germany's power to bring a world war to a satisfactory end."

Yet Field-Marshal Conrad von Hötzendorf, Chief of the Austrian General Staff, has published Moltke's letter to him in which the latter said that he would smash France by the forty-second day of mobilization, and then come to Austria's aid ; and the German Official Naval History has given Moltke's reply to the Admiralty that the navy need not interfere with the transport of the B.E.F., "he could settle with the 160,000 English at the same time as the French and Belgians." Little sign of lack of confidence there ! Prince Max continues : "His (Moltke's) conscientiousness made him delay almost longer than the safety of the Empire allowed before advising the Emperor to order the general mobilization." He took care, however, that German troops should secure the Luxembourg railways and prepare to enter Belgium before this decisive sign was given.

As a British authority, "The Manchester Guardian History of the War," evidently an interesting work, is constantly quoted. The British aims are depicted as denying Germany "a right to existence and development, . . . The freedom of the seas was and ought to have been put forward as an essential German war aim." He

justifies intensive submarine warfare on the ground of the blockade, which at the end was "killing 800 German non-combatants daily with perfect deliberation," and adds :

"The maintenance, even the intensification of the blockade at a time when not only the German submarine war but the whole war, so far as Germany was concerned, had come to an end, is among the greatest infamies of the century."

Has he forgotten the blockade of Paris and its victims, and the shelling of that capital to which even Bismarck objected as purposeless ? Prince Max denies that the peace was a just one ; for it said nothing about the Freedom of the Seas, and drew continental frontiers to "satisfy the strategic aspirations of certain favoured nations."

For one thing we are grateful to the Prince. He has admitted and proved that by the 4th of October, 1918, the German Armies were definitely beaten in the field. They may or may not have been on the verge of a complete military *débâcle* ; but if they were not, Ludendorff's request for an armistice was only a trick to gain time—to prepare for further resistance.

Ludendorff, we are told, "thought only of his worn-out and dwindling troops, and he was possessed by the conviction that the enemy would grant the respite he asked for ; then he hoped to be able to fight again and avert the worst." And it was not only Ludendorff who despaired, but Field-Marshal von Hindenburg. "His tone was calm, unlike that of General Ludendorff's messages. Actually, however, his position was the same as Ludendorff." Prince Max begged for time for his new Government

"to frame a home policy and declare its war aims. Give me a breathing space of ten, eight, even four days before I have to appeal to the enemy. But I kept receiving the same answer : 'The gravity of the military situation admits of no delay. . . . We have so far survived this attack ; I am expecting a new mass attack within a week, and I cannot undertake to guarantee that there will not be a catastrophe.' At the word 'catastrophe' he corrected himself ; the words he then used were in substance 'or at least the most serious consequences.'"

Subsequently, on the 3rd of October, Hindenburg put his views in writing :

"The Supreme Command insists on its demand of Sunday the 29th of October, that a peace offer to our enemies be issued at once . . . the situation becomes daily more critical and may force the Supreme Command to take momentous decisions.

"It is desirable in the circumstances to break off the battle in order to spare the German people and its Allies useless sacrifices. Every day wasted costs thousands of brave soldiers their lives."

The Prince adds, "The essence of it all was the battle must be broken off . . . unless the armistice came, the Supreme Command gave us up for lost." Ludendorff's "continual refrain was 'the army needs rest.'"

Not until a month after all this, on the 3rd of November, did the news of the mutiny of the Fleet come, and not until the 6th of November did the Social Democrats deliver their ultimatum.

One puts down the book with the feeling that on the Prince's showing Germany did not possess a single great and even level-headed man when the crisis came; but it was hardly for a German to hold up his countrymen to the derision of the world.

There is a portrait of the Prince and a series of sketch-maps showing graphically the spread of the revolution over Germany from the 5th to the 9th of November.

In *Révolution et nouveautés de la Grande Guerre* (Paris, Berger-Levrault, 10 francs), M. B. Cloche has written a thoughtful book on the war on somewhat new lines, marred only by the fact that he can see nothing but the French Army. It is commended to the attention of the French public by a member of the academy, M. Bédier. In his opening chapter, the author points out that the generals were up against entirely new problems: weapons, technical procedure, military science all suffered transformation. There was a complete revolution in the art of war. Success had to be sought in new discoveries or new procedures. In the end the French won because their chiefs, their staff officers and their engineers were unsurpassed, and

"by their inventions [he refrains from mentioning tanks or gas], their strategy, and their tactics, mastered the enemy. The horrors of the war have so much impressed the public and the simple soldiery, and so many families have suffered the loss of relatives, that the services of the commanders have been obscured, and their generation has not been sufficiently grateful to them."

It is the commanders he would praise more than their staffs. Napoleon and Frederic the Great actually commanded in chief. Subsequently the Prussians, feeling that they could not produce a Napoleon, invented the General Staff as a collective brain, "*Napoléon en plusieurs têtes.*" Unfortunately France after 1870

followed suit, and became renegade to the Napoleonic conception. It was not until the command of all the Allied forces was bestowed on Marshal Foch in 1918 and he worked without a General Staff, assisted like Napoleon by a personal staff only, that the road to victory was opened.

The first defeats were entirely due to the revival of antiquated tactics, a reversion to the charge without regard to the effect of modern fire. The great factor at the Marne was surprise. The Germans, believing the French beaten, half-starved and dead with fatigue, suddenly found the enemy had turned on them and enveloped them. There was the incredible spectacle of Moltke, "frightened not for a few minutes, but for five entire days, struck with atrophy and stupor, and crushed for the whole battle." Even more startling was the change of moral after the battle. The Germans, who had entered on the campaign as a matter of scientific pillage and certain of a rapid victory, collapsed and began to fear vengeance. As Moltke said, "we shall have to pay for all the damage we have done." The Marne was essentially a victory of French civilization over German *Kultur*. "For half a century France had figured as a conquered nation. Victorious, she became strong and respected. A victory effaced in three days fifty years of humiliation."

The Race to the Sea and the formation of an unbroken front were novelties. If the Marne restored France to her place of supremacy, the fighting at Ypres left the Germans dumbfounded. All the success in Flanders is attributed to Foch. The French cavalry which left the field exposing Haig's flank is representing as charging the flank of the Germans!

The operations of the year 1915 certainly reflected no credit on the French Command. M. Cloche, after pointing out the strength of the German defence, says that, after the first failure, "it was the great fault of the General Staff that they did not stop the bloody and useless assaults. We were not ready, it was necessary to wait." He then describes how hard the French generals worked their brains to discover a solution of the problems, hampered by lack of proper means not yet available. Admitting the strength of will of Marshal Joffre, he asks, "Was he the greatest military intellect of his time?" He finally concludes that he was selected for political reasons, the Parliamentarians fearing that if they appointed a first-class man he might declare himself dictator.

Submarine warfare, aeroplanes, creeping barrages, removal of incompetent generals and a variety of smaller subjects are touched on, and by managing to overlook tanks and gas, the author attributes all

progress to the French, and to their general plan of sticking to the Western Front as the principal one, without wasting forces on "side-shows" as Germany did.

It is not often that the *Militärwochenblatt* leaves anything in doubt, but in No. 11 of the 18th of September, 1928, it publishes two somewhat conflicting statements.

In column 404 Lieut.-General von Altrock, a well-known author, in dealing very interestingly with panic in war, describes how an alarm was started in Alsace by the report of a French attack made by certain customs officers with "local knowledge" (the inverted commas to the word "*ortskundige*" are his) left on the frontier, to an officer of Fortress König Wilhelm II :

"The frontier guard commander believed the false report and telegraphed it on without giving the source of information. It was ascertained for certain by a forester that on this day the French had withdrawn 10 km. from the frontier ; thus there was no enemy in the neighbourhood."

In column 421 another, less well-known, Lieut.-General, named Kabisch, in an angry article contradicting the *Matin*, speaks of "the falsehood that in the first days of August the French evacuated the 10 km." and of the "Pharisees" who spread it. He goes on to a delightful quibble. He claims that in France the *forestiers* and *douaniers* belonged to the Army ; therefore they carried on military frontier protection service. "In Germany," he says, "foresters, customs and frontier officials have no connection with the Army !" Lieut.-General von Altrock has told us significantly that certain customs officials with "local knowledge," were in August, 1914, left on the frontier obviously for military purposes and did send military—though as it happened false—reports. He has also said that the 10 km. zone was found to be clear.

We leave the two German lieutenant-generals to fight out this point and the 10 km. zone one too.

TRANSLATION

General Kannengiesser's book "Gallipoli," reviewed in July, 1927, has been translated into English by Major Ball of the 29th Division, under the title of "The Campaign in Gallipoli" (Hutchinson, 21s.).

REVIEWS AND NOTICES OF RECENT BOOKS AND ARTICLES ON MILITARY SUBJECTS

Record of the 59th (North Midland) Division in 1915-18. Wilfred Edmunds, Ltd., Chesterfield.

THE 59th was the Second Line North Midland Territorial Division, offspring of the more famous 46th. But the younger formation has a fine and, in some respects, unique record which is preserved in this volume, published by subscription at 7s. 6d.

Lieut.-General C. F. Romer, who commanded the Division from April, 1917, to June, 1918, rightly styles the book "a collection of reminiscences" and himself contributes a survey of the career of the 59th during his time. Other writers include Major-General Sir N. M. Smyth, V.C., several infantry and artillery brigadiers, a battery commander, "Dados," and the chief clerk at divisional headquarters. Lieut.-Colonel E. U. Bradbridge, A.A. & Q.M.G., who opens the symposium, also carried out the editorial work.

The 59th Division was formed at the beginning of 1915. The infantry consisted of a Sherwood Foresters brigade, a Staffordshire brigade, and a Lincoln and Leicester brigade. First of the Second Line Territorial divisions to be adjudged fit for active service, the Division became the mobile force for coast defence and its state of readiness resulted in its despatch to Ireland when reinforcements were needed to crush the Irish rebellion in 1916. The account of the fighting in Dublin that Eastertide is one of the most interesting parts of the book.

Service in Ireland prevented the 59th carrying out any divisional training, and it had to send large drafts of its best men to the 46th. Nevertheless, on landing in France early in 1917, it was put straight into the trenches south of the Somme, and, a few weeks later, was engaged in following up the retreating Germans. The 59th Division carried out a very successful attack at "Third Ypres" and did very well at Cambrai. It fought valiantly during the black days of March, 1918, where its losses were so great that it was afterwards reconstituted with "B1" units drawn from anywhere

but the northern Midlands. But it fought with great credit in Flanders during the advance to victory.

Although the narratives tend to overlap, the various points of view of the contributors have a particular interest not always to be found in other more pretentious "divisional histories."

The accounts of the unveilings of the various divisional war memorials have been reprinted from local newspapers; the appendices deal with a number of matters, ranging from the official descriptions of gallant deeds which won reward to the programmes of brigade race meetings. There are many portraits and other pictures.

The Murmansk Venture. By Major-General Sir C. MAYNARD. Hodder and Stoughton. 20s.

Few of us clearly understand the reasons impelling the British Government to intervene in Northern Russia in 1918. With our man-power run almost dry and with bitter experience of "side-shows" the reasons demanding consent to another must have been of extreme cogency. General Maynard clearly explains why a strong Military Mission and the small Expeditionary Force of which he was given command set out for North Russia.

Briefly, this nucleus crew was to build up a new front in Russia and so stem the flow of German divisions to France. Subsidiary advantages to be gained were denial to Germany of access to Russia's vast material resources, exploitation of which would neutralize the effect of our naval blockade, and prevention of her establishment of submarine bases in ice-free ports whence attacks on American transports crossing the Atlantic might have been launched.

General Maynard's pleasantly and modestly written book gives an absorbingly interesting story of the difficulties successfully overcome by the Expeditionary Force. Not all these were local: some of the most embarrassing arose from the aloofness of the Whitehall mind, which failed from the outset to appreciate the fact that prompt cash payment for labour and material was essential if Allied influence was to be established successfully.

The commander entrusted with important responsibilities and the conduct of an expedition entailing infinite tact and ingenuity could not be allowed financial discretion, but was asked to reward services with salted herrings. Again, when, from local experience, he reports Patchenga as ice-bound, he is asked to modify his exaggeration since the port is shown in the Whitehall books as ice-free, and ice-free it must be.

Two things strike one, however ; the cordial relationship between the Murmansk commander and the War Office, whose wholehearted support stands out in marked contrast to that afforded by other departments of State, and the cheerful optimism with which General Maynard and his staff encounter exasperations at the front.

As the situation changed with the Armistice so political considerations became more complicated, while yearnings for demobilization begat restlessness in a Force wherein moral had been sorely tried by almost perpetual darkness, loneliness, depressing environment and an irregular mail service.

General Maynard admits that his story will not provide many valuable strategical or tactical lessons. One did not expect this, but from it one learns other lessons just as valuable : the liability of any soldier to face complicated political situations with allies of varying temperament and enthusiasm, with improvised troops, improvised transport, precarious arrangements for maintenance and, behind all, unconscious comedians in Whitehall.

Oddities : A Book of Unexplained Facts. By Lieut.-Commander RUPERT T. GOULD, R.N. (Retd.). Philip Allan & Co. 12s. 6d.

These essays consist of a selection from the lesser-known mysteries of the past described in a way which shows that the author has read widely and deeply enough to describe each in appropriate detail. In his preface he fears that "scientifically minded persons" may find the book superficial, and that the general reader may consider it dull. But he has done his best to guard against the latter contingency by ensuring a great variety of subject, and by leaving his facts unexplained. His own conclusions, in the cases where they are advanced, are never thrust upon one and the reader will always feel at liberty to disagree with him, or to indulge in speculation of his own.

"The Devil's Hoof-marks" is of pretty general interest, and seems to defy solution if the suggested sea-beast is not accepted. The case of the coffins in the Barbados vault provides a psychic problem. "The Ships Seen on the Ice" is an excellent story of the sea and, perhaps, the best of all these essays : one feels inclined to agree with Commander Gould that these vessels were really the lost *Erebus* and *Terror*. Perpetual motion, prophecy, astronomy, mathematics, navigation, electrical research, all have their place in the other mysteries. There is a copious index.

The Publications of the Champlain Society. Select British documents of the Canadian War of 1812, Vol. III., Part II., edited by WILLIAM WOOD. Toronto, The Champlain Society.

In this volume the Champlain Society has issued another of the very interesting series of documents of the Canadian War of 1812, namely an appendix of miscellaneous papers under fifteen headings, and with it a full index to the first three volumes of the series.

The first of these documents consists of a journal kept by Captain W. H. Merritt of the Niagara Dragoons in regard to events principally on the Detroit and Niagara frontiers of Canada ; and this journal is both important as giving the personal impressions of a young temporary soldier, who was less than twenty years old when war broke out, and is attractive on account of the frankness of the writer, who among other opinions believed that rashness was a good quality in a general officer. After being present at the capture in 1812 of General Hull's American force and at the battle of Queens-town, Merritt retired from the Service early in 1813, "with a strong desire never to re-enter it," and then "made more money in a week than I had during the war." However, he soon raised a troop of dragoons, and after more moving accidents by flood and field was captured at the battle of Lundy's Lane in 1814 by "six fellows who were skulking from the fire, which then raged with great fury." While prisoner at the village of Cheshire near Albany news was received of the capture of Washington by a British force. In regard to the suggestion of the American editor of the journal that supplied the news that, "no quarter should be given to an invading army," Merritt makes a comment singularly like some of those made during our Great War : "He does not appear to recollect their invasion of Canada, that unfortunate province, which they have never ceased to annoy since the declaration of war, although the population does not exceed half a million, whereas our army is invading a nation of ten millions, who declared war at a time when we were fighting for the liberties of the world."

Another group of papers deals with friction, that in the circumstances was almost inevitable, regarding the treatment of prisoners of war. In one case the Americans coolly notified in the Gazette that certain important prisoners, who were on parole in the States, had been exchanged ; this the Governor-in-Chief and Commander of the Forces in British North America rightly repudiated, pointing out that he could not "admit the right assumed by the American Government . . . to arrange and class the exchange of

prisoners of war as may best suit their convenience or advantage. . . ." On another occasion, in the autumn of 1813, twenty-three American prisoners, who were believed to be natural-born British subjects, were sent to England to be tried as criminals. The Americans then promptly put in confinement twenty-three British soldiers, prisoners of war, to be held as hostages for the safety of the others. The British retaliated by throwing forty-six captive American officers and non-commissioned officers into prison in Quebec, and the Americans in their turn placed forty-six British officers, who were prisoners, in close confinement. All American officers, prisoners of war to the British, were then imprisoned as hostages for the forty-six ; and the Americans raised the total of British prisoners confined by way of retaliation to two hundred and fifty-three, but pointed out that, if the system were pursued, " in six months every British prisoner in the States will be thus confined ; and double the number of Americans." The upshot was unfortunate from the British point of view, for no evidence could be brought against the men who had been sent to England, and the whole of the prisoners, therefore, were released and became eligible for exchange in the middle of 1814.

The 1st and 2nd Battalions The Leicestershire Regiment in the Great War. By Colonel H. C. WYLLY, C.B. Gale & Polden, Ltd., Aldershot. Price 25s. net.

This is the history of the two Regular battalions of the Leicestershire Regiment during the Great War. The 1st Battalion went to France with the 6th Division and remained with it until the end. The Battalion took its part at Ypres, Hooge, on the Somme, at Cambrai in 1917 and came out of action on the 23rd of March, 1918, only forty strong. It shared in the " Advance to Victory," and finally formed part of the Army of Occupation.

The 2nd Battalion was in India at the outbreak of war and came to France with the Indian Corps, being in the Garhwal Brigade of the Meerut Division. It left France in the autumn of 1915 with the Indian Corps for Mesopotamia, where it took part in the desperate fighting to relieve Kut, in the advance up the Tigris and in the capture of Baghdad. This, however, was not the end of the Battalion's service, as it went in January, 1918, to Palestine and took part in the final stages of the campaign in that country.

Colonel Wyllly has done his work well, and the story of the Leicestershire Regiment in the Great War is one that is worth

telling. The maps for the actions in France are good, but it would have been better if some sketch-maps had been provided for those of the Mesopotamia Campaign; a map on a scale of $\frac{1}{1,000,000}$ is hardly suitable.

Some Rambles of a Sapper. By Brigadier-General H. H. AUSTIN, C.B., C.M.G., D.S.O. London, Edward Arnold & Co. Price 16s. net.

Although his African experiences are merely mentioned in this volume, General Austin provides his readers with what is almost an autobiography; for reminiscences of boyhood, of days of young manhood at the "Shop" and Chatham, and of two "most instructive and pleasant" years spent at the Camberley Staff College are given, as well as tales of adventure and peril in India, in Iraq, and on the high seas. The whole provides a graphic picture of the variety of activities that have fallen to the lot of a soldier who served his country honourably and well for more than thirty-one years.

During his career General Austin was employed on, or visited, almost every part of the long Indian frontier; and not the least valuable parts of the book are the clear descriptions both of the topography and climate of these wild regions—his picture of a storm in the valley of the Kabul river being especially realistic. A good idea of the character of some of the inhabitants of the frontier forty years ago is also gained, when one reads that the Waziris were accustomed to cut off the head of every Nasir captive, but before much blood had time to gush up they clapped a nearly red-hot iron plate on to the headless neck, and watched with glee the leaps and bounds that the body then made.

A stirring man of his generation General Austin naturally came into contact with men of similar character, and among those whom he met were Field-Marshal Sir William Robertson and Sir Henry Wilson. In regard to the former, who was then a subaltern, he remarks that: "One soon felt that his somewhat rough exterior covered a dour, determined Scot spirit, in no wise daunted by such difficulties as seemed to lie in his path towards the attainment of success in his profession." As a matter of fact, however, Sir William was born in Lincolnshire. Sir Henry, we are told, then in 1903-1904 "a major (surely a misprint for colonel?) at the War Office," several times assisted the directing staff while General Austin was at the Camberley Staff College. "He was always

bright and sparkling in his criticisms. . . . Yet one did not always feel sure that his judgment was sound, perhaps because the Irish temperament is often credited with a tendency to volatility."

There are two maps in the book on which the important places mentioned in the text are marked ; but the maps are awkwardly placed for reference, because, although early among the letterpress, they face left. It must also be pointed out that it was General Melliss, not General Gorringe, who commanded at the battle of Shaiba.

Foreign Legionaries in the Liberation of Spanish South America.
By A. HASBROUCK. [Columbia University Press.]

The reductions in the British Army after Waterloo and throughout the years 1817 to 1821 threw vast numbers of veterans of the Peninsular War on a labour market which had nothing to offer. It was a field rich in opportunity for the agents of the revolutionary States, and their tempting offers of rewards—unfortunately seldom fulfilled—found a ready response among the unemployed soldiery, despite official prohibitions from the Government of the day. Between 1816 and 1819 thousands of officers and men flocked out, but they soon learned that campaigning on the tropical shores of Venezuela was a very different experience to that in the Peninsula. It was a period of weeding out, of training and of hardening. In 1819 Bolivar, the great Liberator, felt the time had come to put into effect his long-thought-of plans of striking boldly at the Spanish Royal forces. Between 1819 and 1821 the most decisive battles were fought, and it was to the valour of the foreign legionaries in battle that success was due. The British habit of working up to a bayonet charge carried all before it. It was during this period that Bolivar made his famous march from the Middle Orinoco over the Andes—a tale of hardship and endurance seldom, if ever, equalled ; but hardship was the daily lot of those who lived through the campaigns under Bolivar and his lieutenants. After 1821 the chief services of the foreign legionaries consisted in their influence in training the native troops.

We owe Mr. Hasbrouck a debt of gratitude for rescuing from oblivion the services, in whatsoever cause, of men like Arthur Sandes and his Rifles, James Rooke and Thomas Ferriar of the British Legion, John Macintosh and the Albion Battalion, and Johannes Uslar late of the King's German Legion. Nor did our Navy fail to send representatives, for John Illingworth and Daniel Dannells were responsible for creating a navy.

Leave Me With A Smile. By ELLIOTT WHITE SPRINGS. Heinemann.
7s. 6d.

The American Air Force has given us, in the anonymous "War Birds" and in "Nocturne Militaire," by the author of the present work, two very excellent war books, and it is perhaps in comparison with these, as well as with certain other war novels, that "Leave Me With A Smile" is somewhat disappointing. The hero, a wing commander, finds himself on his return from the front after the Armistice, engulfed in a sea of troubles, which one cannot but feel are largely of his own making. He manages, much against his will, to miss marriage with a very attractive heroine; to get entangled with a highly undesirable wife who from the first plays him false, and of whom he is eventually well rid; to estrange himself from his father and most of his old friends; and to undertake a life-work in a Southern cotton mill, for which he has little capacity and less taste. Mr. Spring's very considerable powers of character-drawing and description, combined with a frankly-expressed and unusual admiration for all things British, make the book pleasant reading; but one closes it with the feeling that his ability has been wasted on an inconclusive and unsatisfactory story.

Warriors Still At Ease. By ANTHONY ARMSTRONG. Methuen.
3s. 6d.

Mr. Armstrong, whom we imagine, though his name does not appear as such in the Army List, to be a serving officer, continues in this little volume his humorous descriptions of various phases of life in an infantry battalion. Those who, either in his previous book or in the pages of *Punch*, have already made the acquaintance of those doughty warriors Captain Bayonet, Lieutenants Holster and Swordfrog, Sergeants Grenade and Haversack, and Privates Pullthrough and O'jector, will be delighted to renew it here, and those who have not yet done so have an enviable pleasure before them, though they will be well advised, since humour is best taken in small doses, not to try to drain Mr. Armstrong's well-spiced cup at one gulp.

Soldiers' Tales. Edited by The Hon. Sir JOHN FORTESCUE. Peter Davies. *Recollections of Rifleman Harris.* 6s.

Life and Entertaining Adventures of Mrs. Christian Davies. By DANIEL DEFOE. 7s. 6d.

Notebooks of Captain Coignet, 1799-1816. 7s. 6d.

It is gratifying to see that the success of the first three volumes

of these military memoirs has been such as to encourage Messrs. Peter Davies to continue with the further publication of this attractive series of "Soldiers' Tales" which might perhaps more appropriately be termed "Old Soldiers' Tales." It is curious that none of these three new volumes were in reality the unaided work of their so-called authors, and that considerable doubts have been raised as to the authenticity of two of them.

Harris's recollections were taken down from his own mouth, long after he had retired into civil life as a shoemaker in Soho, by one Mr. Curling, a half-pay officer of the 52nd Foot, who put them into literary shape and published them as late as 1848—forty years after the events therein described. The book is rambling, discursive, and in places inaccurate; nevertheless it gives a vivid picture of the British soldier of the time and of his fearful experiences in the retreat to Corunna and at Walcheren, and was well worth reprinting. Harris—or Curling—has a sober yet effective manner of telling his tale which convinces us of its essential truth. He shows us an army, heroic yet grumbling, tenacious yet indisciplined, drunken, brutal and licentious, yet with a magnificent *esprit de corps* and fighting qualities; and in particular he clearly depicts for us the personality of Craufurd, the commander of his division, of whom he says that "he was in everything the perfect soldier; I never admired any man who wore the British uniform more." Officers of Craufurd's stamp, stern martinets with clear heads but hard hearts, were apparently necessary to enforce discipline among the rough, untamed scoundrels who at that time composed the bulk of the British Army; yet "Daddy" Hill, of whom Harris gives a brief but pleasant glimpse, and whose methods of command were far different, not only died without an enemy in the world, but was the ablest and most successful of all Wellington's generals.

The memoir of Mrs. "Kit" Davies is usually, as here, attributed to Defoe and appears in his collected works beside the memoirs of the anonymous Cavalier and those of the semi-apocryphal Captain Carleton; but judged by internal evidence alone, it bears little trace of his able pen and would seem to be the work of some far more pedestrian hack-writer. No doubt the author—Defoe or another—had talked with Kit and taken down her personal experiences and her more amusing adventures from her own mouth; but he has unfortunately interlarded these with pages of narrative of campaigns and sieges, usually irrelevant and often of doubtful accuracy; while many of the other incidents turn on jests the coarseness of

which has now lost its humorous appeal. On the whole this tedious tale is only intermittently entertaining, and seems decidedly out of place among the other excellent volumes in the series.

Of the last of the three diarists, Captain Coignet, once of the Consular and Imperial Guard, whose military career, opening with Marengo and closing with Waterloo, incorporates the whole of the Napoleonic epic, it cannot be said that he ever fails to entertain ; but his book can hardly bear Sir John Fortescue's description of it as that of a " simple soldier," writing with " transparent truth." Coignet died at Auxerre as late as 1865, and the testimony of many of his fellow-townsmen who knew him personally shows him to have been a man of the type of Sir Conan Doyle's Etienne Gerard, an inveterate teller of tales which every day and in every way grew better and better. When he was finally induced by friends to put pen to paper, it was found necessary, to introduce order into the undigested mass of story by reading to him the volumes of Thiers's " Consulate and Empire " as they came out and crystallizing around each battle and campaign the appropriate accretion of reminiscence. Thiers's guidance was available only up to the year 1808 and other inferior works had to supply it for the last period of the Memoirs, which were published locally in 1851 and had but indifferent success. After the author's death a new draft was by chance discovered, and for this the veteran had evidently made use of Thiers's later volumes as published ; and it was this second draft which, edited by M. Loredan Larchey, became a " best-seller " in France and is now re-issued in English in this series of " Soldiers' Tales." Unfortunately, Coignet has followed his guide too slavishly, even where, as in the story of Moreau's death, the latter is demonstrably incorrect ; and it would be difficult now to disentangle the Thiers from the Coignet, and quite impossible to distinguish the true from the false, in the medley of the veteran's outpourings. All that can be said is that they give, with much verisimilitude, a lifelike picture of that happy-go-lucky, free-and-easy Grand Army that for a decade dominated Europe. Sir John Fortescue, like a good Englishman, is somewhat shocked by certain of its traits, particularly by its lack of strict discipline. This peculiarity, however, is national rather than especially military, and of all time.

In none of these three books, then, can we reasonably expect to find historical accuracy as to dates, places, and incidents ; what we cannot fail to gain from them all in greater or less degree is a vivid

glimpse of the soldier of the past, with his virtues and vices, his sufferings and courage, which is of absorbing interest and value.

Shikar. By Lieut.-Colonel C. H. STOCKLEY. Constable & Co. Price 12s.

Colonel Stockley is not only an expert *Shikari* but is also a keen naturalist and lover of nature. In this volume he describes most vividly, shooting experiences in all parts of India. All the chapters make excellent reading, and the only thing we do not like is the killing of six tahr on one morning. We were glad to read of the author finding a telegram of recall from leave on his return to camp. The book is well illustrated by numerous very good photographs.

The History of the Suffolk Regiment, 1914-1927. By Lieut.-Colonel C. C. R. MURPHY. Hutchinson & Co. Price 30s.

This is mainly the story of the twenty-two battalions of the Suffolk Regiment during the Great War, as well as that of the Suffolk Yeomanry, which became the 15th Battalion of the Regiment on the 1st of January, 1917, during the same period. In addition there are short accounts of the doings after the war of the battalions that still exist as well as a brief pre-war history of the Yeomanry. To write such a history in a volume of 400 pages and to make it interesting and complete is no easy task, but Colonel Murphy has overcome the difficulties. Without entering into too much detail the parts the various battalions took in the actions in which they were engaged are clearly described, and, although each battalion is dealt with separately, coherence is not lost. Of the battalions that left England all except two, the 1/5th and 15th, which both served in Gallipoli and with the E.E.F., went to the Western Front. The book is well got up and well printed. There are some mistakes in the indexing and the map supplied is hardly sufficient.

First Class Polo. By Brigadier-General R. L. RICKETTS. Gale & Polden, Aldershot. Price 5s.

The author was a member of the Ulwar polo team which carried all before it in India from 1900 to 1903, and in this book he describes the methods of training and tactics by which this success was achieved. Polo is a game that perhaps more than any other requires real team work and sound tactics to secure victory, yet many still seem ignorant of the fact. A book like this was required and, as

Sir George Milne says in his foreword : " If those who are captains of teams will read this short book and instil its principles . . . the game will benefit." It is a worthy successor to General de Lisle's well-known work.

The Way of Peace. Essays and Addresses. By Viscount CECIL.
Philip Allan & Co., Ltd., London. Price 12s. 6d.

Lord Cecil has collected and republished twelve lectures and addresses delivered by him at different times during the last five or six years. They are all variations of the same subject—the absolute necessity for the avoidance of war, the value of the League of Nations for this purpose, the achievements of the League in the cause of international cooperation as well as of arbitration and disarmament. Each of them individually was doubtless a useful and timely exposition for the audience to which it was addressed, but there is inevitably much repetition, and the volume does not seem to contain any new contribution to a theme on which so much has been written and thought. We note that in one place he suggests as a method for avoiding war " that there should be a zone between nation and nation, demilitarized and made incapable of being used without delay and preparation for the defence of an invading army." We will confess that we cannot clearly conceive the nature of such a zone. Are there to be no railways and no roads ? There is some danger in the use of terms such as " demilitarized."

It would have been more convenient if the different addresses had been printed in chronological order. It is awkward to go from one delivered in 1928 to one delivered in 1923.

Britain and the War. A French Indictment. By General HUGUET, late Chief of the French Military Mission attached to the British Army. Translated by Captain H. Cotton Minchin. Cassell & Co., Ltd., London. 15s. net.

This is a translation of the late General Huguet's book, a review of which appeared in the last number of the *Army Quarterly*. It will doubtless be read with annoyance by English readers, but it is unlikely that many of them will attach much importance to General Huguet's opinions, which certainly do not represent the views of the vast majority of French officers who were brought in touch with the British Army in France. It is satisfactory to learn that however great General Huguet's contempt was for our statesmen

and generals, he could yet appreciate the stubborn valour of our soldiers. His reflections on the characteristics of the English people and his views on British diplomatic policy since the war are of little interest or value—but his countrymen would be quite wrong to suppose that the British people underrate, or are likely to teach their children to underrate, the magnificent part that the French nation and Army played in the war.

India : the new phase. By SIR STANLEY REED, K.B.E., and P. R. CADELL, C.S.I., C.I.E. Philip Allan & Co., Ltd. 3s. 6d. net.

The Westminster Library is to be congratulated on the addition of *India : the new phase* to its series. The joint authors state that the whole object of their little book [of 168 pages] is to present the main elements of the Indian problems in the simplest form, so that it may guide the British democracy in its influence on Parliament. They have succeeded admirably well. Whether in the description of the working of the reforms during the last seven years ; of the part the Indian States [one-third of India] play ; of the vital position of agriculture and the agriculturists [72 per cent. of the population] ; of manufacturing industries ; of the difficulties in the way of education, and of social progress, the reader will find one and all written with insight, with an exceeding lucidity, and without bias. It is the same with the problem of defence. India can never hope to protect of its own strength its extremely vulnerable coast-line. Be it for the defence of the N.W. land frontier or for the support of the civil power in a continent of vast extent, of diverse people and of antagonistic religions, an efficient army must be maintained. The authors rightly assert that a national army is altogether foreign to the history and usage of India. Among other problems attending an Indianization of the officer cadre they properly point out that the rank and file of an army whose companies are composed each of men of a particular caste or tribe will never readily obey one of their own countrymen who differs in those particulars.

International Law. A treatise by L. OPPENHEIM, M.A., LL.D. Vol. I.—Peace. 4th edition, edited by ARNOLD D. MCNAIR C.B.E., LL.D. Longmans, Green & Co., Ltd. 42s. net.

The fourth edition of the second volume of this standard work (War, Disputes and Neutrality) was published barely two years ago. The corresponding issue of the "Peace" volume has now appeared

to bear testimony to the industry of Dr. McNair, for the League of Nations was only six months old when the third edition, which has been out of print for a long time, came out in 1920. One can imagine the labour required to bring it up-to-date.

In his preface the editor indicates where the larger and more important of the new annotations are to be found. They are concerned with the subjects of International Law; the Codification of the Law of Nations; the Recognition and the Equality of States; Financial Intervention and Control; the Measure of Damages and Interest; and with the section on the Expiration and Dissolution of Treaties. New sections which have been added deal with the Protection of Minorities; the International Labour Organisation; and with Slavery and the Slave Traffic. The English text of the Covenant of the League of Nations, a list of the more important non-political General Conventions, and a list of the Labour Conventions and Recommendations adopted by the General Conference of the International Labour Organization are now included as appendices.

Both in the table of the late Professor Oppenheim's works and in the biographical note reprinted from the third edition it is mentioned that the author was associated with Colonel J. E. (now Brigadier-General Sir James) Edmonds in the preparation of a manual of land warfare. This, "The Laws and Usages of War," is Chapter XIV in our "Manual of Military Law."

Viscount Haldane of Cloan, O.M., The Man and His Work.
Humphrey Milford, The Oxford University Press. 1s. net.

This tribute to Lord Haldane, reprinted from the organ of The Institute of Public Administration, recounts his achievements as Secretary of State for War, examines his influence on higher education and administration, and describes his career as Lord Chancellor. In the preface Viscount Grey of Fallodon says, "Haldane at the War Office was an example of Statesmanship in action."

Sir Charles Harris, a distinguished civil servant with War Office experience, contributes the main article. He shows how Mr. R. B. Haldane (as he then was) tackled the problem of Army reform, creating the British Expeditionary Force and the Territorial Force, and gave us a real General Staff. Haldane's colleagues of the Cabinet are very moderately described as "profoundly uninterested in military questions."

In a succeeding article Sir Frank Heath rightly observes that

Haldane's methods and ideas on higher education and administration found expression in the War Office, and mentions his chairmanship in 1923 of the committee which reported on the training of Royal Engineer officers.

The Frequent Gun and a Little Fishing. By PATRICK R. CHALMERS. Philip Allan & Co., Ltd. Price 10s. 6d. net.

This is a collection of articles and verses that have already appeared in print, the former in *The Field* and the latter in *Punch*. They are well worthy to appear again in a collected form. Mr. Chalmers knows how to tell of gun, of rod, and of dogs; his stories of the latter are, we think, as good as any of the articles in the book. We recommend the article "Worth Doing" to those who are in search of good books on big game.

The Empire and the Army. By THE HON. SIR JOHN FORTESCUE, K.C.V.O. Cassell & Co., Ltd. 10s. 6s. net.

In his preface the author tells us that this book is written primarily for the British soldier. We are confident that it will find a much wider circulation; it is a book that all who take any pride or interest in the Empire or the Army should read.

Sir John traces the history of the Army from its birth to the present day, and with it the growth of the Empire. The campaigns and actions are briefly described and the political situations discussed. Changes in uniform, drill, and armament are explained as they occurred, and a chronological table is supplied. If only as a book of reference it should be in every library.

Amateur Soldiers. By W. G. THOMAS. The Old Royalty Book Publishers. 3s. 6d. net.

In this little book of verses on the Great War, Mr. Thomas, according to his "Prologue," has set himself to dispel any belief that soldiery are a devil-may-care lot or that war is a playground. In "Amateur Soldiers," from which the book takes its title, he sums up the stages through which passed those who entered the war early and lived to the end. "Gentlemen of England" is a rousing remembrance of the answer that all classes made to the call of duty and sacrifice. "Richebourg St. Vaast," "Festubert," "Loos," and "The Assault" bear witness to individual memories. "Corporal Nym"

tells the tragic story of the boasting bully who, as so often, is a pitiful coward. In "The Coward" is portrayed the unbalanced mind of one whose conscience told him of his cowardice. In "Orvillers' Ridge," "The Leaning Virgin," and "Festubert, 1919," the True Hope is held out in the memory of the Cross on high on which the stricken Christ was hung. In "Ten Years After," the author lets himself fall back on an ironic depiction of some common beliefs held before reality brought disappointment. The book ends with some simple lines on the thoughts which every "Village Cross" must invoke.

An Outline History of the Great War. By G. V. CARY and H. S. SCOTT. The Cambridge University Press. 6s. net.

The authors' wish is to dispel the false glamour that is apt to be shed on war by tales of heroism and memories that tend to leave out the unpleasant and recount only those that were pleasant and exhilarating. They desire that a generation whose parents helped to make the history of those critical years may know not only what war felt like to those who went through the experience but be reminded of the events themselves. Therefore they have given a concise narrative of the war, and suggested various authors from whose books the "atmosphere" may be obtained in greater detail. While adequate space is found for brief summaries of the spread of the war and the parts played by the Allies outside France, there is a regrettable omission of the inter-relations of the part played by the British Army in France with that of the French Army. This is a pity because it would have explained so much of the need of the fighting into which the new and inexperienced British battalions were thrust—fighting which was fraught with such terrible casualties and with such apparent uselessness. The need for compression in the accounts of the battles has led to the omission in so many instances of reference to higher leadership and higher organizations, with the consequence that the war is made to appear an affair of divisions fighting on no obvious plan. The brevity of the account of the tragedy of the fighting which failed to relieve Kut seems out of proportion to the length of the story of the thrust towards Baghdad; the impression is left that it was General Townshend who was in chief command in Mesopotamia, and not Sir John Nixon, whose name is never mentioned.

Notwithstanding such omissions, which it is thought detract from the completeness of even an "outline," the authors have given

the public for which it is intended a very readable and adequate story.

The summary in the concluding chapter, which deals with the attitude of the individual to the daily routine of a long war, is distinctly good. The authors also do well to bring out the redeeming features which are a fruit of the call to service. Despite the sceptic, class barriers were largely broken down and comradeship did become a real and unforgettable thing. The ideals, too, which were focussed in that wonderful Talbot House at Poperinghe were indeed a portent of hope, for the remarkable world-wide Christian brotherhood of "Toc H" is showing new generations how "to transplant in peace time soil the noblest of the spiritual products of the War."

A Saharan Venture. By DONALD R. G. CAMERON, F.R.G.S.
Edward Arnold & Co. 18s. net.

In spite of Mr. Cameron's repudiation of literary merit he has written a most readable and interesting account of a venture the difficulties and dangers of which are almost hidden in the mode of their relation. Mr. Cameron was at the time a subaltern in the Royal Scots but seconded with one of the battalions of the Nigerian regiment, a service which the chief of the General Staff has particularly commended to young British officers.

Leaving Kano in Nigeria on the 11th of October, 1926, he reached Warghla in Algeria on the 5th of April, 1927—a matter of 2,000 miles. His companions were Baragai, late of the Nigerian regiment, Sakari, a Hausa, who had accompanied Captain Buchanan across the Sahara in 1922, and Malam, who combined the qualifications of a cook with those of a linguist. Mr. Cameron gives high praise to their loyalty, endurance and cheerfulness.

Passing northward through the mountains of Air in which lay the French outpost forts of Agades and Ifaruan, Mr. Cameron struck out east of the Ahaggar Mountains to Fort Charlet at Djanet through country never before traversed by a Britisher. He was now accompanied by a guide, two camel men, and twelve camels. It was in the waterless stretch of 200 miles to Djanet that his guide lost the way, and for ten days the party were in most dire straits during which they were reduced to one mug of water a day: the casualties were five camels and the faithful Sakari.

From Fort Charlet the route was round the north-east of the Ahaggar Mountains across the Tassili Plateau past Forts Polignac and Flatters, and thence across the Great Oriental Erg—a desert of

sand-dunes—to Warghla. Mr. Cameron has much of interest to tell of the solitariness of service in the French outposts [in comparison with which British outposts are Paradise] and of the little-known revolt in the Eastern Sahara during the years of the war.

Das Deutsch-Englisches Englisch-Deutsches Militäi-Wörterbuch.
By K. H. EITZEN. Verlag Offere Werte, Berlin. Price 8 Reichsmarks.

This is an up-to-date little dictionary of military terms and phrases such as is required by military students of the German language. The book is of convenient size.

Some Military Conversations and Official Communications in French.
By Lieut.-Colonel J. H. GETTINS, D.S.O. Gale & Polden. Price 3s.

This is a second edition of a unique work of its kind. It can be thoroughly recommended to students of French military terms, and has been compiled so as to associate these terms with actual wartime situations.

The War Department, 1861: A Study in Mobilization and Administration. By A. HOWARD MENEELY, Ph.D. Columbia University Press, New York. 25s.

There can be no more striking example of the consequence of unpreparedness for war than that afforded by the United States Government in 1861. Dr. Meneely, indefatigable in research, offers a ruthless analysis of causes and effects, including a searching study of the character of Simon Cameron, Secretary of State for War from March until January of the following year, when his departure from office, we are told, "was hailed as equivalent to a great Union victory."

The army and army administration had been continuously neglected since 1812, and the imminence of civil war found the new Republican Government with all to do in the way of military preparation: the recruitment and training of troops; provision of arms, ammunition and equipment, shoes and clothing; the organization of transport and communications. For a time the activities of the northern states, to say nothing of voluntary effort, transcended the ill-coordinated and half-hearted measures taken

by the federal authority, and much waste, confusion and delay were caused thereby. Dr. Meneely explains the inefficiency of the War Department in these terms : " Never before in our national history had a new party enjoyed such opportunities for plunder. In addition to the customary peace-time patronage, ever increasing, came the tremendous political and military spoils of war. It is not surprising that the War Department should have been more crowded with seekers of privilege and favour than the rest. With a master politician as its chief how could it have been otherwise ? "

It took the disaster of Bull Run in July to show that victory could not be won by " poorly organized, ill-equipped and undisciplined three-months militia," and Lincoln at once approved the Bill authorizing the acceptance of 500,000 three-year volunteers. But the great task of creating an army fit to fight, and of choosing its commanders, was still to do. Owing to lack of confidence in Cameron, and to the state and army influences so freely brought to bear on them, Cabinet ministers—Blair, Chase, Seward, and Lincoln himself—were continually meddling in War Department affairs, and abuses of all kinds were still rife. However, there were some men who were doing good work among them—Thomas A. Scott, Cameron's assistant, who organized the railways, and, later, Montgomery C. Meigs, the efficient quartermaster-general. It is to these two that Dr. Meneely attributes whatever good was achieved by the end of 1861. That much had been done was indisputable, for when Cameron gave place to Stanton in January there was " an army of more than half a million men in field and camp, fairly well armed, clothed, and fed."

Such glimpses of Lincoln as are afforded in the account of these difficult months show the President at first eager for conciliation and thus averse to energetic war measures, and always fettered by the abuses of the political system and the lack of expert counsel.

The Story of a North Sea Air Station. By C. F. SNOWDEN-GAMBLE.
Oxford University Press. 21s. net.

Under this modest title Mr. Gamble introduces us to a complete history of the Royal Naval Air Service from its inception in April, 1912, to its absorption in the Royal Air Force in April, 1918, and thence to the Armistice. The title, R.N.A.S., was not as might be supposed the original designation of this Service. When the Royal Flying Corps was formed in 1913 it was divided into two wings, the military wing and the naval wing. The term

naval wing, however, never came into general use ; it was early supplanted by the term Royal Naval Air Service, and this in course of time received official recognition. Except that they operated in a common element and that they shared a Central Flying School, the tendency was for the two Services to diverge more and more until, ultimately, they were competing against each other in the aircraft market, to the advantage of industry but hardly to that of economy and of the successful prosecution of the war—hence, very largely, the Royal Air Force as it exists to-day.

Of these and other things the author tells us in convincing style. In particular, he gives us a detailed account of the German air raids on England. These were the concern of Yarmouth in that this station lay roughly in the area in which the Zeppelin commanders made their landfall ; moreover, from Yarmouth were attacked the airships engaged on fleet reconnaissance in the North Sea. It was an attack on one of these (L 44) ships which gave rise to one of the epics of the R.N.A.S. On the 5th of September, 1917, two aircraft from Yarmouth, one land machine and one flying boat, met and attacked L 44 some fifty miles from the English coast. The Zeppelin escaped after an hour's running fight, chiefly owing to its superior rate of climb. Struck by A.A. fire from German craft on the water, the land machine was compelled to come down in a rough sea. The flying boat, commanded by the late Wing Commander Vincent Nicholl, alighted and rescued the crew of the land plane, but owing to increased weight and a high sea his boat was unable to take the air again. It was therefore decided to taxi towards England. Contrary winds, high seas and, eventually, lack of petrol defeated this project. For four days the boat drifted in the North Sea, the crew bailing without ceasing ; nor had they any food. Eventually, they were found by a gunboat whose commander had determined that he would find the missing aircraft. To this officer and to a carrier pigeon the six occupants of the boat owed their lives.

An unusual and attractive feature of the book is the account of the activity of the German aircraft opposed to Yarmouth station, the information being supplied by German officers who took part in the incidents narrated. It is of exceptional interest first to read a pilot's account of his attack on a German airship or aeroplane and subsequently to read the account of the same incident by the German occupants of the airship or aeroplane. One thing we must confess, that in the air, whether over land or sea, the German airman displayed qualities of the best kind. With Mr. Gamble we agree

that, "Brave, dashing, chivalrous, and skilful, they were opposed to us in action, although we were identical in spirit."

The book is excellently illustrated with both British and German photographs; particularly good are the drawings by Mr. L. Bridgeman, formerly of Yarmouth, now on the staff of *The Aeroplane*.

By all who would learn of the work of the Royal Naval Air Service, not only at Yarmouth but elsewhere, Mr. Gamble's book should certainly be read.

Historical and Military Essays. By the Hon. Sir JOHN FORTESCUE, LL.D., D.Litt. Macmillan & Co. 10s. 6d.

Nearly all these essays have already appeared in various newspapers and magazines. One of the exceptions is devoted to the correspondence of the Duke of York with George III during the campaigns of the former in the Low Countries in 1793 and 1794. These campaigns are, of course, fully described by Sir John in his great work on the British Army; the letters here strung together with the necessary comment and explanation serve to show the difficulties of the Duke which would certainly have defeated a much abler man.

In the first half of the book—a series of seven themes suggested by a study of George III's papers—is another new essay. It describes the growth of Cabinet authority and the corresponding decline of the personal influence of the King in military affairs during both war and peace. This change had become an accomplished fact even before the Sovereign displayed symptoms of declining health at the beginning of the nineteenth century.

To those interested in old wars may be commended "A Junior Officer of Marlborough's Staff," "Sick Soldiers of the 'Forty Five," and "British Fights with Germans before 1914." The appreciation of Napier and his history of the Peninsular War quotes some of the well-known passages and is easily the best reading in a volume which is inclined to be dull and is rather expensive.

History of the Great War: Naval Operations. Vol. IV. By Sir HENRY NEWBOLT, 1928. Longmans, Green & Co., Ltd. (2 Vols. Text and Maps.) Price 16s. net. Maps 5s. net.

It is the task of the historian to state what actually occurred, and it is not an easy one. In 1922 the "History of Naval Operations" suffered a heavy blow in the loss of Sir Julian Corbett when his work was only half finished, but the fourth volume fully main-

tains its old high level and Sir Henry Newbolt, his successor, pays a well-deserved tribute to the efficient and enthusiastic staff that Sir Julian Corbett left behind.

The volume covers the period from June, 1916, to April, 1917—the post-Jutland period, the period of the famous Raiders—the *Moewe*, the *Seeadler* and the *Wolf*—and brings us to the time of unrestricted submarine warfare and the peak of its attack in April, 1917.

The battle of Jutland brought no change in the strategic situation. It brought to light grave deficiencies in our shell and fuzes and in the armouring of our battle cruisers emphasized at the time by both the Commander-in-Chief, Admiral Jellicoe, and Admiral Beatty, and on which the history might have laid greater stress. On the German side it convinced Admiral Scheer that he dare not face again the full force of the Grand Fleet, and thenceforth his mind was irrevocably bent towards the alternative of unrestricted submarine warfare.

Only on one other occasion were the two battle-fleets on the verge of an encounter. This was on the 19th of August, 1916. Scheer had disposed lines of submarines off the Yorkshire coast and in the North Sea and had Zeppelins scouting round him. As Admirals Jellicoe and Beatty came down, U 52 sent three torpedoes into the light cruiser *Nottingham*. The Zeppelin L 13 saw Tyrwhitt's force of light cruisers and destroyers away to the southward coming up from Harwich and reported it as battleships. Scheer was completely misled and turned to the southward to engage them. But his mistake brought him salvation, for it turned him out of the path of Jellicoe and Beatty who were thundering down on him with battle flags flying. Scheer got home, and as the Grand Fleet returned U 66 sent two torpedoes into the light cruiser *Falmouth*. It was an eventful day, the first day on which a British submarine signalled the approach of the High Sea Fleet and got a torpedo into one of its battleships—the *Westfalen*. Strategically, too, it was a red-letter day. Admiral Jellicoe had not enough destroyers to screen his cruisers and Admiral Scheer had not enough submarines for fleet work and commerce attack at the same time. And so Saturday, the 19th of August, 1916, marks the close of the era of fleet actions.

The Germans fell back on submarine warfare which had been practically abandoned in British waters since America's sharp note over the *Sussex* (torpedoed without warning on the 24th of March, 1916).

The long drawn out struggle between the Chancellor, who was strongly opposed to unrestricted warfare, and the Admiral-Staff in Berlin burst out afresh. It was to help the submarines that the Germans in October began their destroyer raids on the patrols at Dover. They attacked on the 26th-27th of October and sank a destroyer. It was a night of alarm and mischances. The Germans got away scot free, but of the 57 transports crossing that night with troops and stores, they only found one and it was empty.

These destroyer raids on Dover Straits went on, till on April 20, 1917, they met with sharp and sudden retribution, when Commander E. R. Evans in the *Broke* and Commander A. M. Peck in the *Swift* fell on two German destroyers and sank them, putting an end to these raids for a full year.

The story goes on to tell of the work of the Navy in all quarters of the globe, of river gunboats in the Tigris and of the motor launches *Mimi* and *Tou Tou* on Lake Tanganyika. It tells, too, of our 5 submarines (E 1, E 9, E 8, E 18 and E 19) in the Baltic harassing the passage of Swedish iron ore.

Sir Henry Newbolt passes to the Mediterranean and tells us much that few knew before. It is a plain tale at first of the evacuation of the Serbian Army and of the raid by the Austrian light cruiser *Heligoland* on Durazzo on the 29th of December, 1915, of the rush from Brindisi and the close but ineffectual chase by the light cruisers *Dartmouth* and *Weymouth* and the *Nino Bexio*. Then follows a story of the complications that arose from the attitude of Greece, where we found ourselves associated with a policy of coercion framed by France, till Sir Francis Elliot had to protest that the *Entente* Powers could not bear responsibility for measures resolved upon and carried out solely by the French Government.

The end of 1916 was the era of German raiders whose story is vividly told in one of the most interesting chapters of the book. We are told of the *Moewe* (Count zu Dohna Schlodien), the sailing ship *Seeadler* (Count von Lückner) and the *Wolf* (Captain Nerger). They ranged the oceans of the world with some two score ships looking for them; the *Moewe* had 23 vessels—cruisers, light cruisers and armed merchant cruisers—looking for her in January, 1917.*

The *Wolf* had 24 searching for her vainly in the spaces of the sea. The *Leopard*, trying to follow them, was brought to book by the *Achilles* and *Dundee* and sunk on the 16th of March, 1917. Not one of the ships that reached the ocean was captured—a telling commentary on the relative efficacy of convoy and patrols. It is

* There is a printer's error on page 181, where *Aphir* should be *Ophir*.

on this note of convoy that the book ends, with the advent of unrestricted submarine warfare.

The contest which raged round the latter policy is the bass note of the German naval history. For two long years Admiral Tirpitz, the Admiral's staff and Admiral Scheer had been wrestling over it with the Chancellor, Karl Helfferich, and Herr Jagow. In the summers of 1915 and 1916 the protests from America had resulted in its practical suspension in British waters. But after Jutland Scheer became convinced that it was the only solution, and as the horizon grew dark he won Hindenburg and Ludendorff over to his side.

In vain Jagow and the Chancellor tried to stem the flowing tide. At the momentous Conference held at Pless on the 9th of January, 1917, the Kaiser gave an All-Highest pronouncement—Unrestricted warfare to commence on the 1st of February. It was before a *Reichstag* packed to overflowing that the Chancellor announced the Emperor's decision. It listened in tense silence. All Europe was listening. America too, for it meant the entry of the United States into the war. All this is told in the volume, never told before so clearly and exhaustively in any English book. The storm broke in full force in February, 1917—all merchant ships, Allied and neutral, in British waters, to be sunk at sight.

The history shows clearly that if it had not been for the coming of Admiral Jellicoe to the Admiralty in December 1916, we must have succumbed. His first step as First Sea Lord was to institute the Anti-Submarine Division, and it was this division which, first under Rear-Admiral A. L. Duff and then under Captain (now Vice-Admiral) W. W. Fisher, became the nucleus of subsequent remedial measures, including convoy.

The volume ends in April, 1917, when the storm was at its height—871,628 tons of shipping, Allied and neutral, sunk in the month, of which 96 per cent. was by submarines, figures which, if maintained, must have spelt the collapse of the Allies by the end of the year.

Holtzendorff, the Chief of the German Admiral's staff, calculated for 600,000 tons of British shipping a month. In April, 1917, he got 512,999 tons. But by April the measures introduced by Admiral Jellicoe were just beginning to bear fruit. Convoy for the French coal trade had started in February. Admiral Beatty had helped to start the Scandinavian Convoy in April. It was introduced for the Atlantic Trade in June.

The curve of sinkage fell steadily; the curve of submarine destruction rose. By November, 1917, the clouds were beginning

to break. The storm had spent its force. But Holtzendorff's calculations were, for a month or so, not so far out. It is this story that the history tells and it is a story splendidly told.

Pseudo-Security. By J. M. SPAIGHT. Longmans, Green & Co., Ltd. Price 12s. 6d.

In this interesting and well-written book Mr. Spaight turns a clear beam of practical commonsense and logical reasoning on to the idealistic aims of the more progressive enthusiasts at Geneva.

He begins by explaining that the Covenant of the League of Nations neither bans all wars, nor makes all kinds of war illegal, nor even prevents wars stigmatized by itself as unlawful, and that its own guarantees and penalties are themselves only rendered possible by the possession of armaments by its member States.

He describes the Guarantee Clause as a delightful one "from the point of view of the guarantor who wishes to avoid onerous commitments" but "from the point of view of the guaranteed, who wants some assurance of help in his hour of need, it is practically worthless." He is very doubtful of the effectual application of the "Sanctions" clause and rightly emphasizes the slowness of its primary weapon, economic pressure, while he shows how slowly too its supplementary weapon, military action, is likely to be applied.

But Mr. Spaight's main purpose is to voice the contention that the advent of air-power "has made the successful working of any system of world peace guaranteed and enforced by a league a sheer impossibility." And from the moment he approaches this theme he seems to lose a little of the temperate soundness characteristic of his early chapters. Had he supported his argument with utterances by authorities as weighty as those he has invoked in support of his previous contentions he would have been more convincing. But he quotes several "pseudo-authorities,"—if one may borrow his phrasing,—one of whom at least inclines to sensational talk with his tongue in his cheek.

Still, Mr. Spaight makes the excellent point that the best protection against effective conversion of civilian into formidable military aircraft is the maintenance of adequate military air forces. The performance of military machines is so superior as to outclass adapted civil machines. Abolish or reduce this deterrent and the world is at the mercy of the Powers with the most highly developed air organization.

Mr. Spaight inveighs only against the League's assumption of

tasks which he feels it cannot perform and against reduction of limitation of armaments. This, he feels, means reduced rather than increased security. Whether one agrees or not, it is refreshing to find the subject discussed so reasonably.

Who's Who, 1929. A. & C. Black, Ltd. Price 45s.

"Who's Who" was first published in 1847, and has grown in size and popularity each year—this volume contains about 32,000 biographies in its 3,392 pages. It is a wonderful book of reference, and its accuracy cannot be surpassed. In spite of the amount of matter it contains the volume is not unwieldy, and the printing and paper are both very good. No library is complete without it.

ARTICLES IN REVIEWS

The Empire Review, September, 1928. "Private Flying," by Lieut.-Colonel J. T. C. Moore-Brabazon, C.M.G., M.P.

The National Review, September and October, 1928. "The Greek Army and the Dardanelles," by Colonel Sir Thomas Cuninghame, Bart., D.S.O.

The Nineteenth Century and After, September and October, 1928. "Memories of 1914-1918: VII. The Marshes of the Yser; VIII. Dawn on the Asiago" (*concluded*), by C. O. G. Douie.

Blackwood's Magazine, October 1928. "Some new light on the Indian Mutiny," by Lieut.-General Sir George MacMunn, K.C.B., K.C.S.I., D.S.O.

The Cornhill Magazine, October, 1928. "Why Hannibal Did Not Take the 'Path to Rome,'" by G. Bagnani.

The Edinburgh Review, October, 1928. (1) "The Mechanization of the Army," by Colonel J. F. C. Fuller, C.B.E., D.S.O.

This article forms a review of "The Future of the British Army," by Brevet-Major B. C. Denning; "The Mechanization of War," by V. W. Germaines; and "Artillery: To-day and To-morrow," by Colonel H. Rowan-Robinson.

(2) "The Roman Legions," by Sir Charles Oman, M.P.

The Cornhill Magazine, November, 1928. "The Battle of Kirkee: November 5, 1817," by Lieut.-General Sir George MacMunn, K.C.B., K.C.S.I., D.S.O.

The Nineteenth Century and After, November, 1928. "The Elimination of War," by Colonel J. F. C. Fuller, C.B.E., D.S.O.

The Nineteenth Century and After, December, 1928. "The Sublimation of War," by Lieut.-Colonel A. G. Baird Smith, D.S.O.

The Fortnightly Review, December, 1928. "The Air Defence of Britain," by Lieut.-Colonel H. de Watteville.

LIST OF BOOKS RECEIVED

"The Oxfordshire and Buckinghamshire Light Infantry Chronicle, 1927." Compiled and Edited by The Chronicle Editorial Committee. Vol. XXXV. January to December, 1927. Published by Slatter & Rose, Limited.

"The Story of a North Sea Air Station." By C. F. Snowden-Gamble. Published by Oxford University Press. 21s. net.

"Select British Documents of the Canadian War of 1812." Vol. III, Part II. Published by The Champlain Society, Toronto.

"Military Operations, France and Belgium, 1915." Vol. IV. History of the Great War based on Official Documents. By direction of the Historical Section of the Committee of Imperial Defence. Published by Macmillan & Co., Ltd. 12s. 6d. net. Case of Maps 5s. 6d. extra.

"An Outline History of the Great War." Compiled by G. V. Carey and H. S. Scott. Published by Cambridge University Press. 6s. net.

"The Note-Books of Captain Coignet, soldier of the Empire." Edited by The Hon. Sir John Fortescue. Published by Peter Davies, Ltd. 7s. 6d. net.

"Recollections of Rifleman Harris." Edited by Henry Curling. With an Introduction by The Hon. Sir John Fortescue. Published by Peter Davies, Ltd. 6s. net.

"The Life and Adventures of Mrs. Christian Davies, commonly called Mother Ross." By Daniel Defoe. With an Introduction by The Hon. Sir John Fortescue. Published by Peter Davies, Ltd. 7s. 6d. net.

"Shikar: Being Tales told by a Sportsman in India." By Lieut.-Colonel C. H. Stockley, D.S.O., M.C., F.R.G.S., F.Z.S. Published by Constable & Co., Ltd. 12s. net.

"Record of the 59th (North Midland) Division in 1915-18." Published by Wilfred Edmunds, Ltd., Chesterfield.

"Without Censor." By Thomas M. Johnson. Published by The Bobbs-Merrill Company, Indianapolis.

"Some Rambles of a Sapper." By Brig.-General H. H. Austin, C.B., C.M.G., D.S.O. Published by Edward Arnold & Co. 16s. net.

"Amateur Soldiers." By W. G. Thomas. Published by The Old Royalty Book Publishers. 3s. 6d. net.

"History of the Leicestershire Regiment." Published by Gale & Polden, Ltd. 25s. net.

"Pseudo-Security." By J. M. Spaight. Published by Longmans, Green & Co., Ltd. 12s. 6d. net.

"The Empire and the Army." By The Hon. Sir John Fortescue, K.C.V.O. Published by Cassell & Co., Ltd. 10s. 6d. net.

"First Class Polo. Tactics and Match Play." By Brig.-General R. L. Ricketts. Published by Gale and Polden, Ltd. 5s. net., post free 5s. 3d.

"A Saharan Venture." By Donald R. G. Cameron, F.R.G.S. Published by Edward Arnold & Co. 18s. net.

"Viscount Haldane of Cloan, O.M. The Man and his Work." By Viscount Grey of Fallodon, K.G., Sir Charles Harris, C.B.E., K.C.B., Sir H. Frank Heath, C.B.E., K.C.B., Sir Claude Schuster, G.C.B., C.V.O., K.C. Published by Humphrey Milford, Oxford University Press. 1s. net.

"The Egypt of the Sojourner." By Gladys Peto. Published by J.M. Dent & Sons, Ltd. 5s. net.

"Malta and Cyprus." By Gladys Peto. Published by J. M. Dent & Sons, Ltd. 5s. net.

"The Frequent Gun and a Little Fishing." By Patrick Chalmers. Published by Philip Allan & Co., Ltd. 10s. 6d. net.

"India : The New Phase." By Sir Stanley Reed, K.B.E., and P. R. Cadell, C.S.I., C.I.E. Published by Philip Allan & Co., Ltd. 3s. 6d. net.

"Oppenheim's International Law." Vol. I.—Peace. (Fourth Edition). Edited by Arnold D. McNair, C.B.E., LL.D. Published by Longmans, Green & Co., Ltd. 42s. net.

"The Way of Peace." By Viscount Cecil. Published by Philip Allan & Co., Ltd. 12s. 6d. net.

"Naval Operations." Vol. IV. History of the Great War, based on Official Documents. By Sir H. Newbolt. Published by Longmans, Green & Co., Ltd. Text, 16s. net. Maps, 5s. net.

"Britain and the War." By General Huguet. Published by Cassell & Co., Ltd. 15s. net.

"Historical and Military Essays." By The Hon John Fortescue, LL.D., D.Litt. Published by Macmillan & Co., Ltd. 10s. 6d. net.

"The East Yorkshire Regiment in the Great War, 1914-1918." By Everard Wyrall. Published by Harrison & Sons, Ltd. 15s. net.

"A short account of Canteens in the British Army." By The Hon Sir John Fortescue. Published by The Cambridge University Press. 3s. 6d. net.

"Who's Who." Published by A. & C. Black, Ltd. 45s. net.

"The Doctrine of Necessity in International Law." By Burleigh Cushing Rodick. Published by Columbia University Press, New York, and Humphrey Milford, Oxford University Press. 20s. net.

"Annual Report of the Smithsonian Institution, 1927." Issued by United States Government Printing Office, Washington, D.C. \$1.75.

PARLIAMENTARY NOTES

HOUSE OF COMMONS

VOCATIONAL TRAINING.—On the 13th of November, in reply to questions by *Major Glyn*, the *Secretary of State for War* informed the House that approximately 2000 soldiers had passed through the Army Vocational Training Centre at Catterick and 600 at Chisledon ; about 300 were now undergoing training at Chisledon and it was expected that this number would increase shortly as vacancies were now offered to soldiers due for discharge from India. The number of men so trained who had settled in Canada and Australia were 89 and 222 respectively.

ESTABLISHMENT.—On the 13th of November, in reply to a question by *Mr. Becket*, the *Secretary of State for War* stated that the establishment of the British Army, exclusive of India, in 1928 was 151,000. The corresponding figure for 1912 was 186,600.

CHINA.—On the 13th of November, in reply to a question by *Mr. Wellock*, the *Secretary of State for War* stated that there were seven infantry battalions, together with ancillary troops, in China, in addition to the normal garrison of three infantry battalions.

BADGES OF RANK.—On the 15th of November, in reply to a question by *Viscount Sandon*, the *Secretary of State for War* stated that it had been decided that brigadier-generals, not being general officers, should wear the badges of rank formerly worn by colonels commandant, and not cross-swords.

MECHANIZATION.—On the 27th of November, in reply to a question by *Brigadier-General Clifton Brown*, the *Secretary of State for War* informed the House that the units of the experimental mechanized force trained last year on Salisbury Plain would be dispersed. In consequence of the valuable experience gained, two new groups of mechanized units would be formed, one in the Aldershot, and one in the Southern Command.

TERRITORIAL ARTILLERY ADJUTANTS.—On the 4th of December, in reply to a question by *Colonel Clifton Brown*, the *Secretary of State for War* stated that there had been a falling off in the number of suitable applicants for adjutancies in the Royal Artillery of the Territorial Army. If suitable volunteers were not forthcoming, officers were detailed for these appointments.

BERTRAND STEWART PRIZE ESSAY, 1929

Subject selected by the Army Council for the seventh Competition :

“While the 19th century saw the transition from standing armies to nations in arms and a large increase in the size of military forces, the tendency of the 20th century is to substitute machines for men and to develop force by the application of mechanical and scientific invention. What is likely to be the effect of this tendency upon the organization of armies and their operations in war ?”

RULES OF THE COMPETITION

1. The right to compete is limited to British subjects, who have served, or who are actually serving, as officers or in other ranks or ratings of His Majesty's forces.

2. The term “ His Majesty's forces ” includes the Navy and the Royal Marines, the Regular Army, the Special Reserve, the Territorial Army, the Militia, and the Royal Air Force, the New Armies which took part in the late war, and also the Naval, Military and Air forces of India, the Dominions and the Crown Colonies.

3. The essays submitted for the prize must not exceed 10,000 words in length ; they must be typewritten and submitted in quadruplicate.

4. The authorship of the essays must be strictly anonymous. Each competitor must adopt a motto and enclose with his essay a sealed envelope with his motto typewritten on the outside and his name and address inside.

5. The title and page of any published or unpublished work, to which reference is made in any essay or from which extracts are taken, must be quoted.

6. The essays, which are to be addressed to the Editors of the *Army Quarterly*, must reach the office of the *Army Quarterly*, 94, Jermyn Street, London, S.W., not later than the 1st of March, 1929.

7. The essays will be judged by at least three referees—two to be appointed by the Army Council, the third to be one of the

Editors of the *Army Quarterly*. The decision of the Referees, or of a majority of them, will be final.

8. The referees are fully empowered, if in their opinion, or in the opinion of the majority of them, no essay submitted to them comes up to a sufficiently high standard of excellence, not to award the prize ; or they may, if they consider such a course desirable, divide the prize among two or more competitors.

9. The result of the Competition will be made known in the *Army Quarterly* in July, 1929, and the prize essay will be published in that number of the Review. In the event, however, of there being two or more prize essays, the Editors of the *Army Quarterly* reserve to themselves the right of deciding which of these essays they will publish.

10. The copyright in any essay which appears in the *Army Quarterly* belongs to the Proprietors of the Review.

11. Neither the Proprietors nor the Editors of the *Army Quarterly* are to be held responsible for the loss or return of any essay submitted for the Competition ; nor do they incur any liability whatsoever in connection with the receipt of the essays, any dealings therewith, the judging thereof, or the reports thereon.



